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¹ The letter (a) following entry numbers indicates citation of abstracts which are primary publications; these are usually of theses or of papers read at professional meetings.

Psychological Abstracts

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EDITORIAL NOTE

The Editor regrets to announce the resignation of Dr. Ilse Bry from the Assistant Editorship of this Journal. To Dr. Bry must go a great deal of credit for carrying out the editorial details, and for intelligent collaboration in policy planning, during this critical transition year.

* * *

In order to minimize duplication a cooperative arrangement has been made with the Editor of the *Journal of Consulting Psychology* (see that Journal, 1947, 11, 153) for the joint coverage of new tests. Beginning with this issue new independently published tests will be listed by title and a minimum of formal data. Such entries will include a reference to the review published in the *Journal of Consulting Psychology*. All of these entries, together with new tests described in the usual publication media, will be included in the 12th section, "Psychological tests," of the present classification.

GENERAL

3328. Boring, Edwin G. (*Harvard U., Cambridge, Mass.*) **Psychologists' opinions vs. their sense of evidence.** *Amer. Psychologist*, 1947, 2, 178-179.—This is a plea for experimental controls for determining the transfer value of training courses. An article by Anastasi (21: 1737) on the importance of the undergraduate experimental course is cited as an illustration of a discussion lacking satisfying evidence.—N. R. Bartlett.

3329. Gerard, Ralph W. (*U. Chicago, Ill.*) **The scope of science.** *Sci. Mon.*, N. Y., 1947, 64, 496-512.—There is a sort of continuum of awareness as there is of body from the simplest inanimate system to the most complex living organism. Mind and matter are therefore but different aspects of the same entity. "Man, seeking knowledge of the universe, may find the clues, now from his inner experience, now those from the outer world, more pregnant with suggestions for study." Continuity underlies discontinuity and the lines separating biological from physical science or sociological from biological are only dotted lines. Purpose and value are not extra-scientific and are within the domain of scientific study which reaches from the physical through the biological to the social areas such as sociology and history.—E. Girden.

3330. Leeper, Robert W. (*U. Oregon, Eugene.*) **An analysis of action on science legislation in the last Congress.** *Amer. Psychologist*, 1947, 2, 127-135.—The discussion and votes in the Senate of the 79th Congress on specific proposals for the National Science Foundation Bill are analyzed and discussed.—N. R. Bartlett.

THEORY AND SYSTEMS

3331. Naville, François. **Behaviorisme et psychologie.** (Behaviorism and psychology.) *Gesundh. u. Wohlf.*, 1945, 25, 41-51.—The author criticizes behaviorism, which, with its exclusive occupation with peripheral movements, secretions, visceral and vasomotor modifications, by-passes the essential object of psychology namely, the conscious mental life. One has everywhere the impression that the behaviorist would comprehend things by exploring only an accessory part of them and that he arrives only at an incomplete, rudimentary and inferior science. Nowhere is the inadequacy of behaviorism more strikingly demonstrated than in its explanation of thought as "sensori-motor processes having their seat in the larynx." Against such an hypothesis considerable evidence is cited to the effect that thought can exist without words, in fact can exist with complete abolition of speech.—F. C. Sumner.

3332. Olson, Anders. **Medvetande och Materia.** (Consciousness and matter.) Stockholm: Tiden Förlag, 1944. Pp. 291. Sv. Kr. 9.50.—The principle thesis of this contribution to foundation problems of psychology, is that animistic interpretations of psychological observations must be abandoned completely. The author instances inadequate interpretations in the reflexology of Pavlov and behaviorism, both of which presuppose a neurophysiological "model" which cannot be found or substantiated. He reinterprets the term "conditioned reflex" and explains consciousness in terms of such reflex.—F. Fluge.

3333. Perls, F. S. **Ego, hunger and aggression; a revision of Freud's theory and method.** (2nd ed.) Durban, So. Africa: Knox Publishing Company, 1945. Pp. 303. 21s.—The central conception of the book is that "the organism is striving for the maintenance of a balance which is continuously disturbed by its needs, and regained through their gratification." In the author's opinion, the dynamics of this "psychological homeostasis" cannot be adequately described by the orthodox Freudian psychoanalytical concepts. In Part I, "Holism and Psychoanalysis," he attempts to integrate the Gestalt and field conceptions with the Freudian views and to examine the validity of his new concepts from their semantic aspects. Part II, "Mental Metabolism" consists of an analysis of the paranoid character from the holistic-semantic point of view. A detailed parallel is drawn between the physiological metabolic mechanisms of ingestion, digestion, assimilation, and excretion and the psychological metabolism of the organism. The third part, "Concentration Therapy" proposes detailed instructions for a therapeutic technique resulting from

Perls conception of "avoidance as the central symptom of nervous disorders." Each step, beginning with the eating situation, is presented as a method of strengthening the ego-language and of developing semantic clarification of the boundaries between the self and the environment.—*M. E. Wright.*

3334. Seguin, C. Alberto. *El problema de las relaciones psico-físicas y la medicina psicosomática.* (The problem of psychophysical relations and psychosomatic medicine.) *Rev. Neuro-Psiquiat., Lima*, 1946, 9, 384-390.—The psychosomatic tendency in present day medicine raises afresh the problem of mind-body relation. The theory of psychophysical relations most consonant with the facts of psychosomatic medicine is a psychophysical dualism; the duality is not one of "substance" but rather of "cognition." "All that which we can study by means of our senses, we call matter while that which we are able to study by other means, we call mind, without this difference in the instruments of observation implying a difference in the entity itself." With the acceptance of this viewpoint the problem of the relation of mind and body reduces to that of the duality of knowledge with the unity of the living being. Man is thus viewed as a whole, reacting as a whole, and these reactions are called somatic or psychic according to the point of view from which they can be better observed.—*F. C. Sumner.*

3335. Sherif, Muzafer. (U. Ankara, Turkey), & Cantril, Hadley. (Princeton U., N. J.) *The psychology of ego-involvements; social attitudes & identifications.* New York: John Wiley, 1947. London: Chapman & Hall, 1947. Pp. viii + 525. \$6.00.—The psychology of the formation and functioning of ego attitudes, which are the constituent components of the ego, is governed by the same principles as the psychology of attitudes. The authors, therefore, discuss at length the psychology of attitudes and carry their conclusions to the problem of ego-involvements. Experimental facts concerning the basis of attitudes are examined in light of frames of reference in structured and unstructured situations, and social factors in laboratory situations. The conceptual formulation arrived at is then carried over to real life situations, such as social movements. This is followed by a discussion of ego-involvements which includes such topics as experiments on ego-involvements (e.g., status and class identification as ego-involvements), the genetic formation of the Ego, reformation of the ego in adolescence, adolescence in different cultures, ego-involvements and identifications in group situations, the structural properties of groups, the individual as influenced by group norms and identifications, breakdowns of the ego, the ego in psychoanalysis. The points made are further illustrated in the literary works produced in different countries at different periods of time. 55 references.—*B. A. Wright.*

METHODS AND APPARATUS

3336. Castle, W. E. (U. California, Berkeley.) *The domestication of the rat.* *Proc. nat. Acad. Sci.,*

Wash., 1947, 33, 109-117.—The history, ecology, and genetics of the Norway rat are considered with special reference to the appearance of the albino and the hooded strains.—*L. A. Pennington.*

3337. Martin, Daniel W. (RCA Victor Division, Camden, N. J.) *Magnetic throat microphones of high sensitivity.* *J. acoust. Soc. Amer.*, 1947, 19, 43-50.—An analysis is made of the problem of speech pick-up from anatomical vibration. The best place to locate a throat microphone is directly to the side and above the larynx, since the most intelligible speech sounds occur in the pharynx. The larynx produces nothing but a buzz. The field response of throat microphones varies as much as ± 5 db among different subjects. An inertia-operated throat microphone is described which is efficient enough to serve as a transmitter in a sound-powered telephone system.—*W. R. Garner.*

3338. Thorne, Frederick C. (U. Vermont, Burlington.) *The clinical method in science.* *Amer. Psychologist*, 1947, 2, 159-166.—The schism between clinical psychologists, with their orientation in academic psychology, and medically trained physicians derives in part from the lack of understanding by psychologists of the basic principles of clinical methods. This article is intended to help bridge this gap. The clinical method is analyzed to show its underlying experimental pattern. The objectives, general principles, and the different approaches in diagnosis are reviewed, with a discussion of the role of the science of pathology. Then therapy is treated, with a listing of commonly accepted principles and objectives.—*N. R. Bartlett.*

3339. Wirt, S. E. (Purdue U., Lafayette, Ind.) *A new near-point stereopsis test.* *Optom. Wkly*, 1947, 38, 647-649.—A stereotest standardized and calibrated for the 16-inch reading distance which can be used in the reading card holder of a photometer or held by the patient is presented.—*D. J. Shaad.*

3340. Woody, Thomas. (U. Pennsylvania, Philadelphia.) *Of history and its method.* *J. exp. Educ.*, 1947, 15, 175-201.—Various philosophical conceptions, methodological procedures, and specialized techniques of historical research are discussed. In the section on research techniques the author describes favored methods of note taking, preparing footnotes, bibliographies and indices, and proof reading. The importance of original sources and the criteria of external and internal criticism in judging manuscripts are considered in the second section. 104-item bibliography.—*G. G. Thompson.*

STATISTICS

3341. Bartlett, M. S. *The general canonical correlation distribution.* *Ann. Math. Statist.*, 1947, 18, 1-17.—The simultaneous distribution of sample correlation coefficients when the true correlations are zero has been known for some time. The present paper derives the simultaneous distribution in the general case where one or more of the true

correlations are not equal to zero. The obtained equations are too complicated to be used when there are more than two true correlations not equal to zero.—*L. Festinger.*

3342. Birnbaum, Z. W., Raymond, J., & Zuckerman, H. S. A generalization of Tshebyshev's inequality to two dimensions. *Ann. math. Statist.*, 1947, 18, 70-79.—The inequality, originally stated by Tshebyshev, which gives the upper probability bound for an obtained value deviating by a given amount from an expected value is generalized to the case of two variables taken simultaneously. In the case of two dimensions certain improvements can be made in the inequality without additional restrictive assumptions.—*L. Festinger.*

3343. Blackwell, D. Conditional expectation and unbiased sequential estimation. *Ann. math. Statist.*, 1947, 18, 105-110.—A general formula is developed for determining an unbiased estimate of a population parameter for use in sequential analysis. Previous calculations of unbiased estimates for specific cases are shown to be subsumed under this general formulation.—*L. Festinger.*

3344. Carrier, N. H. Experimental data and 'sufficient' accuracy. *Nature, Lond.*, 1947, 159, 167.—In commenting on a previous article (20: 4445) regarding the use of replication to reduce the probable error of a mean, it is pointed out that continued replication is unwarranted and inadequate once the magnitude of the probable error is of the same order as that of the bias in the measurements.—*A. C. Hoffman.*

3345. Cornell, Francis G. (U. S. Office of Education, Washington, D. C.) Sample plan for a survey of higher education enrollment. *J. exp. Educ.*, 1947, 15, 213-218.—The method of stratified-random sampling was used to survey the fall enrollments in institutions of higher learning for the year 1946. Strata variances in enrollments for previous years were used as a basis for optimum allocation in this sampling. As an illustration of the efficiency of this type of sampling in a finite universe (enrollments in teachers colleges): "The stratified plan used in this survey was, therefore, almost 80 per cent more efficient than the unrestricted random design would have been." This type of survey demonstrates that utilizing available information about a universe in conjunction with techniques that produce desired reliability will minimize the number of returns required in the sample.—*G. G. Thompson.*

3346. Grant, David A. (U. Wisconsin, Madison.) Additional tables of the probability of "runs" of correct responses in learning and problem-solving. *Psychol. Bull.*, 1947, 44, 276-279.—The present paper extends the tables of probabilities of "runs" given in an earlier paper (20: 3074). The second major aspect of the report deals with the problem of repeated statistical tests, when training is to be given until the subject's performance meets any constant criterion.—*S. Ross.*

3347. Johnson, Palmer O., & Hoyt, Cyril. (U. Minnesota, Minneapolis.) On determining three

dimensional regions of significance. *J. exp. Educ.*, 1947, 15, 203-212.—The concept of the "region of significance" has been extended in this paper from 2 to 3 dimensions—with the statement that similar derivations can be extended to any number of independent variables. The statistical formulation and solution of the problem with respect to 3 independent variables is followed by the solution of a practical research problem involving 2 types of college instruction and 3 criteria of ability: A. C. E. Examination, mathematics proficiency, and honor-point ratio. 3 figures presenting graphic examples of 3-dimensional "regions of significance" were unfortunately omitted in publication. 22 references.—*G. G. Thompson.*

3348. Kozakiewicz, W. On the convergence of sequences of moment generating functions. *Ann. math. Statist.*, 1947, 18, 61-69.—Certain relationships are shown to exist between distribution functions of a variable and the distribution functions of moments generated from these frequency distributions. The theorems are proved for the case of univariate and bivariate distributions. The method can be generalized to multivariate frequency distributions.—*L. Festinger.*

3349. Lehmann, E. L. On families of admissible tests. *Ann. math. Statist.*, 1947, 18, 97-104.—It can be shown that there are a family of most powerful tests for testing a statistical hypothesis. The more assumptions and restrictions are put on the test the smaller the family of most powerful tests becomes. Under certain restrictions it reduces to one test.—*L. Festinger.*

3350. Leipnik, R. B. Distribution of the serial correlation coefficient in a circularly correlated universe. *Ann. math. Statist.*, 1947, 18, 80-87.—The serial correlation coefficient is the sum of the products between successive terms divided by the sum of the squares of all the terms. The exact probability distributions of this statistic have been calculated but the equation is unwieldy. Approximate distributions are consequently of value. The approximate distribution for true correlation equal to zero has already been obtained. The present paper obtains the approximate distribution for true correlation not equal to zero.—*L. Festinger.*

3351. Mann, H. B., & Whitney, D. R. On a test of whether one of two random variables is stochastically larger than the other. *Ann. math. Statist.*, 1947, 18, 50-60.—A test is derived for determining significance of difference between two samples based on a rank ordering of all the scores. The bases of the calculation are the rank positions of the scores from one of the samples. The proposed test is essentially identical with several others previously proposed. It is shown that the distribution of the calculated statistic tends toward normality as the number of cases tend toward infinity.—*L. Festinger.*

3352. Marks, Eli S. Selective sampling in psychological research. *Psychol. Bull.*, 1947, 44,

267-275.—The present report demonstrates the possible effect of selective sampling by using two published psychological studies. The importance of control of the sampling process is stressed, if valid generalizations are to be drawn from research data.—*S. Ross.*

3353. Montroll, E. W. On the theory of Markoff chains. *Ann. math. Statist.*, 1947, 18, 18-36.—The statistical theory of chains of dependent events, that is, sequences of events where the probabilities of occurrence of a given event depends upon previous events, is relatively undeveloped. Methods are developed in this paper for averaging certain functions over such a chain and for determining their probability distributions. Several specific applications are discussed.—*L. Festinger.*

3354. Peatman, John Gray. (*City Coll., New York.*) Descriptive and sampling statistics. New York: Harper, 1947. Pp. xviii + 577. \$5.00.—This textbook is divided into 2 parts: I. Descriptive Statistics, and II. Sampling and Analytical Statistics. Following an introductory chapter which presents a brief history of statistics and a description of its use as a research tool are 3 chapters on categorical data and 6 chapters on variate data, which discuss the nature, purpose, and methods of reducing, organizing, comparing, and correlating data from enumeration and experiment. In part II sampling theories and techniques are described; a chapter is devoted to probability; tests of significance are explained; and correlational predictions and factor analysis are discussed. A minimum of mathematics is used in the theoretical treatment. The mechanics of computational methods, including use of machines, are explained. Appendices include a 27-item bibliography, tables of statistical functions and glossaries of statistical symbols and formulae.—*C. M. Louttit.*

3355. Rao, C. Radhakrishna. (*King's College, Cambridge, England.*) The problem of classification and distance between two populations. *Nature, Lond.*, 1947, 159, 30-31.—Solutions are presented for the statistical problem of classifying individuals or populations on the basis of the configuration of various characteristics which have been measured in the sample.—*A. C. Hoffman.*

3356. Santaló, L. A. On the first two moments of the measure of a random set. *Ann. math. Statist.*, 1947, 18, 37-49.—When any random variable is defined the mean and variance of this variable can, in principle, be calculated. In the past such calculations have been carried through for specific examples. The present paper treats some new examples and generalizes some others.—*L. Festinger.*

3357. Walsh, J. E. Concerning the effect of intraclass correlation on certain significance tests. *Ann. math. Statist.*, 1947, 18, 88-96.—Most of the existing tests of significance assume independence among cases in the sample. The effect of interdependence or correlation among cases on the level of significance which the test yields, is investigated.

It is found that the existence of even small amounts of positive correlation among cases affects the significance level markedly in the direction of less confidence. Of the three tests considered the "t" test is affected most, the Chi Square test next, and the "F" test least. It follows that the assumption of independence should be examined carefully in any particular case.—*L. Festinger.*

3358. Welker, E. L. The distribution of the mean. *Ann. math. Statist.*, 1947, 18, 111-117.—An examination is made of the relationship between distributions of means and the distribution of the parent population for various ones of the Pearson distribution curves. The behavior of the distributions of means according to the central limit theorem is examined.—*L. Festinger.*

HISTORY AND BIOGRAPHY

3359. American Psychological Association. Committee on Graduate and Professional Training. *Amer. Psychologist*, 1947, 2, 206.—Portraits of Robert R. Sears, John G. Darley, E. Lowell Kelly, Elaine Kinder, Jean Walker Macfarlane, Donald G. Marquis, Bruce V. Moore, Marion W. Richardson, Carroll L. Shurtle.

3360. Cartwright, Dorwin. (*Massachusetts Inst. Technology, Cambridge.*) Kurt Lewin, 1890-1947. *Int. J. Opin. Attitude Res.* 1947, 1, 96-99.—This is an appreciation of Lewin's career with emphasis on his contributions to systematic psychology and on his application in recent years of the viewpoint of "action-research."—*N. L. Gage.*

3361. Jacobi, Jolan. Die psychologie von C. G. Jung. (*The psychology of C. G. Jung.*) (Rev. ed.) Zurich: Rascher, 1945. Pp. 266.—This second edition, "improved and expanded," of Jacobi's introduction to Jung's *Psychology* (see 14: 3546) has 2 prefaces by the author and an introduction by Jung. The book is subdivided into 3 major portions: (1) the essence and structure of the psyche; (2) laws of the functioning of the psyche; and (3) the practical application of Jung's teachings. (See also 16: 4354, 18: 138). 170-item bibliography.—*A. Rabin.*

3362. Meili, Richard. Charles Edward Spearman, 1863-1945. *Arch. Psychol., Genève*, 1946, 31, 283-286.—Obituary.

3363. Moore, Kate Gordon. (*U. California, Los Angeles.*) Aurelius Augustine on imagination. *J. Psychol.*, 1947, 23, 161-168.—The psychological writings of Augustine are not segregated but must be gathered from his varied works. Passages are cited to show Augustine's treatment of imagination and memory. Augustine searches for a way of life and thinks that knowledge of himself will help that search. He did not approve retirement from the world but rather strove to realize the City of God. This was to be a Christian community of all faithful people and was an imaginative construction of far reaching political historical importance.—*M. Mercer.*

3364. Moore, Kate Gordon. (*U. California, Los Angeles.*) Johannes Scotus Erigena on imagination.

J. Psychol., 1947, 23, 169-178.—Erigena's view on psychological topics are expressed in his philosophical and theological discussions. Ideas of value to the student of the imaginative process are: (a) the concept of creative goodness, which Erigena makes the center of his thought, (b) the relation between the thought and its object, (c) the idea of the union of minds. 10 references.—*M. Mercer.*

3365. Pear, T. H. (U. Manchester, England.) Charles Samuel Myers: 1873-1946. *Amer. J. Psychol.*, 1947, 60, 289-296.—Obituary.

3366. Pear, T. H. Charles S. Myers. *Brit. J. educ. Psychol.*, 1947, 17, 1-5.—Obituary and appreciation.—*R. C. Strassburger.*

3367. Riese, W. The 150th anniversary of S. T. Soemmerring's "Organ of the Soul." The reaction of his contemporaries and its significance today. *Bull. Hist. Med.*, 1946, 20, 310-321.—S. T. Soemmerring was 41 years old when he published his "Organ of the Soul." Of the two major portions of this book the first was devoted to proving that the wall of the cerebral cavities receives the endings of the nerves; the second part to advocating that the fluid contained in these cavities must be considered as the sensorium commune i.e., the organ of the soul. This view, in a sense but a revival of a medieval tradition, created quite a sensation and aroused much criticism on the part of his contemporaries, particularly Goethe and Kant.—*F. C. Sumner.*

3368. Symonds, J. P. Ten years of journalism in psychology, 1937-1946; first decade of the *Journal of Consulting Psychology*. *J. consult. Psychol.*, 1946, 10, 335-374.—This paper traces the history of the *Journal of Consulting Psychology* during the first decade of its existence. The Journal's growth and development are related to changes within 3 psychological associations which have successively owned and controlled it. The Journal's scope was restricted beginning with the 1947 volume to clinical psychology, guidance, and counseling. 142-item bibliography.—*S. G. Dulsky.*

3369. Usdin, Gene L. Sigmund Freud. *Med. surg. J.*, 1947, 99, 569-583.—An account is given of the life and work of Sigmund Freud.—*F. C. Sumner.*

PROFESSIONAL PROBLEMS OF PSYCHOLOGY

3370. Bayton, James A. (Morgan State Coll., Baltimore, Md.) Opportunities for Negroes in psychology. *Amer. Psychologist*, 1947, 2, 207-208.—There is a demand for more courses in psychology in Negro colleges throughout the south. This demand results from general improvement in the curricula of these colleges and from increased enrollment. Aside from teaching in colleges there are opportunities for Negro psychologists as school psychologists and specialists with various types of handicapped children. Several of the southern states maintain separate schools for Negro blind, deaf, feeble-minded, and delinquents, which need trained Negro personnel.—*L. J. Timm.*

3371. Berrien, F. K. (Colgate U., Hamilton, N. Y.) A new type of elementary course. *Amer. Psychologist*, 1947, 2, 148-150.—A course built around class discussions following narrative descriptions of events or problems which individuals actually faced is contrasted with the conventional elementary course.—*N. R. Bartlett.*

3372. Bird, Charles, Heron, William T., Meehl, Paul E., & Paterson, Donald G. (U. Minnesota, Minneapolis.) The foreign language requirement for the Ph.D. *Amer. Psychologist*, 1947, 2, 136-138.—The views of the graduate faculty in psychology at Minnesota on the need for autonomy in setting Ph.D. requirements, as expressed in a formal report to a Graduate School committee, are discussed. Then as a supplement to this report, questionnaire data from 68 psychologists holding a Ph.D. degree from Minnesota are presented. 39 of the 68 felt that a student should be permitted options, 11 that the language requirement be abolished, 10 that only one language be required, and only 4 that the requirements be continued as at present.—*N. R. Bartlett.*

3373. Blocksma, D. D. (U. Chicago, Ill.), & Porter, E. H., Jr. A short-term training program in client-centered counseling. *J. consult. Psychol.*, 1947, 11, 55-60.—The 6-week program set up by the University of Chicago to train Personal Counselors for the Veterans Administration is described in terms of curriculum, teaching methods, and apparent course of learning.—*S. G. Dulsky.*

3374. Fernberger, Samuel W. (U. Pennsylvania, Philadelphia.) The future of psychology, or the goose that laid the golden eggs. *Amer. Psychologist*, 1947, 2, 209-210.—During the war psychologists proved their usefulness so conclusively that at the present time there is a continuing demand for clinical psychologists. The program for training clinical psychologists by the VA is sensibly conceived and certainly no one can question the necessity of such a program. However, the extreme attractiveness of the program and the assured jobs at desirable salaries after training is likely to lead to a general movement of the best men and women into the applied field. Experimental research will suffer and fundamental training will be left in the hands of "second raters." If this happens the growth of the systematic structure of psychology will be stunted with a consequent restriction upon the limits of application.—*L. J. Timm.*

3375. Hawley, Paul R. (Veterans Administration, Washington.) The importance of clinical psychology in a complete medical program. *J. consult. Psychol.*, 1946, 10, 292-300.—The medical program of the Veterans Administration must have the important services of clinical psychologists to be complete. The clinical psychologist has three chief functions: diagnosis, research, and therapy. Because the demand for clinical psychologists is greater than the supply, the Veterans Administration is sponsoring a nation-wide training program in clinical psychology. 24 universities have been accredited by the American

Psychological Association to give such training.—*S. G. Dulsky.*

3376. Hilgard, Ernest R. [Chairman.] (*Stanford U., Calif.*) Annual report of the Policy and Planning Board of the American Psychological Association: 1947. *Amer. Psychologist*, 1947, 2, 191-198.—The American Board of Examiners in Professional Psychology has already established standards of certification which call for the doctoral degree and 5 years of experience. Standardization at a lower level is necessary and may be accomplished through licensing or certification by state legislatures. Certification without specification as to field of practice is the more desirable method. Requirements for membership in APA should be raised so that the grades of membership will parallel those recommended for certification. Another way of establishing standards is by accreditation of the institutions at which individuals receive their training. Certain dangers are inherent in the practice of accreditation but they can be minimized and the long range benefits of accreditation should be sought. Psychologists should not over-emphasize the problems and the importance of clinical psychology. To protect the public and the profession against inadequate or fraudulent services a special committee has been appointed to prepare a code of professional ethics.—*L. J. Timm.*

3377. Landsman, Theodore, & De Martino, Manfred Frank. (*Syracuse U., Syracuse, N. Y.*) Some areas of caution for the psychology student. *Amer. Psychologist*, 1947, 2, 145-147.—Specific advice is offered to students on how to avoid entanglements with classmates or friends who appeal for psychological aid.—*N. R. Bartlett.*

3378. Ley, Enid S. (*Amer. Psychol. Assoc., Washington 5, D.C.*) Personnel placement activities of the APA; report for the year 1946. *Amer. Psychologist*, 1947, 2, 213-215.—During 1946, 336 job requests were received by the APA. In 11% of the cases jobs were filled by people referred by the APA, but in 51% of the cases the jobs were not filled from any source.—*L. J. Timm.*

3379. Rapaport, David. (*The Menninger Foundation, Topeka, Kan.*) The future of research in clinical psychology and psychiatry. *Amer. Psychologist*, 1947, 2, 167-172.—A plea is made for clinical research, and the national situation with respect to personnel and funds for such research is discussed. Steps for encouraging more work are outlined; some of them are: (1) "We must build up professional public opinion which will build up dams against the lures of private practice by giving recognition and standing to people in research and not merely, as it has been done so far, to people who write papers"; . . . (2) we must build up "a public awareness of the need for research. . . . A discipline whose earning power is great and which in addition is oversold is in danger that its needs will not be seen"; (3) we must press for long-range grants under the National Mental Health Act; and (4) we must point out to private foundations the need for assistance with

functions that are not supported under the National Mental Health Act. The last paragraphs of the article review the current research activities at the Menninger Foundation.—*N. R. Bartlett.*

3380. Sears, Robert R. (*U. Iowa, Iowa City.*) Clinical training facilities: 1947; a report from the Committee on Graduate and Professional Training. *Amer. Psychologist*, 1947, 2, 199-205.—In response to a request by the VA and the USPHS the Committee on Graduate and Professional Training, by use of mailed questionnaires, collected information about clinical training facilities for graduate training in psychology departments throughout the country. Only institutions expressing an intention to present doctoral training in clinical psychology were considered. 40 institutions returned the questionnaires. The Committee developed what they considered to be criteria of adequate facilities for such training. After considering the questionnaires from the point of view of these criteria the Committee reports the extent to which each of the 40 institutions meets them. Only 18 institutions met all of the criteria. However, there are 11 more institutions whose needs are relatively minor or which will satisfy the criteria soon.—*L. J. Timm.*

3381. Taylor, Franklin V. (*Naval Research Laboratory, Washington, D. C.*) Reply to "Professional frustration in government psychologists." *Amer. Psychologist*, 1947, 2, 178.—"An example of one group of psychologists who have not experienced professional frustration is furnished by the experimental psychologists at the Naval Research Laboratory. . . . Psychological research programs are conceived by psychologists, executed by psychologists and reported by psychologists. There is no administrative interference whatsoever with any phase of research."—*N. R. Bartlett.*

3382. Ullmann, Charles A. (*War Department, Washington.*) The training of clinical psychologists. *Amer. Psychologist*, 1947, 2, 173-175.—Inferences drawn from statistics of duties performed by psychologists in a particular military situation should not be the only guide to the proper training of clinical psychologists for military service. The success which clinical psychologists enjoyed in an early-established Army program with special training units for personnel unable to handle standard courses of instruction is attributed in large part to the broad training and administrative capabilities of those psychologists. "It may be that clinical psychologists will attain full professional stature, both intrinsically and in relation to other professions, only if, in addition to developing insight into personality and competence in counseling and therapy, they acquire expertness in organization and management and develop and apply their administrative capacities."—*N. R. Bartlett.*

3383. Whittemore, Irving C. (*Boston U., Boston, Mass.*) Counterpoint to a "Footnote to military psychology." *Amer. Psychologist*, 1947, 2, 208-209.—The place for military psychologists is not outside

the armed forces, acting freely in an advisory capacity. The civilian in a military establishment is faced with many problems. He does not "belong" to the establishment; he cannot issue directions nor demand assistance and it is doubtful that a civilian would be afforded access to the materials upon which investigations of significance would have to be based. Although a psychologist in uniform may hold a low rank, he may still influence the judgment of his superiors who are rarely prejudiced in a technical sense. As for judging the value of military psychology, it might be well to have the judgment rendered by the military.—L. J. Timm.

[See also abstracts 3400, 3412, 3422, 3441, 3520.]

PHYSIOLOGICAL PSYCHOLOGY

3384. Coujard, R. (*Faculté de Médecine de Paris, France.*) *Étude des glandes odorantes du lapin et de leur influence par les hormones sexuelles.* (The odorous glands of the rabbit and their control by sex hormones.) *Rev. canad. Biol.*, 1947, 6, 3-25.—The odorous glands of the rabbit are of two kinds: anal, which are identical in the sexes, and inguinal, which show slight structural differences. The former mature about the time of puberty, retrogress after castration, and show equal sensitivity to follicular and testicular hormones in the sexes. Inguinal glands, however, show slightly different reactions to the two hormones in males and females, corresponding to the structural differences observed.—D. K. Spelt.

3385. Dantín Gallego, J. *La fatiga y su medida. Capacidad física.* (Fatigue and its measurement. Physical capacity.) *Psicotecnia*, 1945, 5, 19-54.—A summary of some of the research on muscular fatigue is presented. Such topics as factors in fatigue, general indications of fatigue, physiological mechanisms involved, and devices for the measurement of fatigue and physical capacities are discussed. Emphasis is placed on the need for determining physical capacities of the individual to obtain maximum adjustment in a work situation. 42-item bibliography.—C. G. Browne.

3386. Finger, Frank W. (*U. Virginia, Charlottesville.*) *Convulsive behavior in the rat.* *Psychol. Bull.*, 1947, 44, 201-248.—The studies on convulsive behavior in the rat have been brought together by the writer in the hope that integrative thought will be stimulated in the form of theories of behavior mechanisms. The value of the investigation of induced seizures is discussed. The basic divisions of the paper are the classification of convulsive seizures, the convulsive patterns, the variables affecting convulsive behavior, and the effect of convulsions. A separate section deals with the physiological bases of convulsions. 174-item bibliography.—S. Ross.

3387. Follis, Richard H. (*Aero Medical Lab., Wright Field, Dayton, O.*) *Studies on the biological effect of high frequency radio waves (radar).*

Amer. J. Physiol., 1946, 147, 281-283.—A radar sending unit with a peak output of 45 Kw and a wave length of 10 cm was used. Antenna wire 2 feet from a holder containing 13 male guinea pigs which were exposed 3 hours daily for 51 to 53 days. Control animals were in shielded compartments. "No effects were noted on appearance, growth, body temperature or reproduction. Histological examination of the tissues [nerve, muscle, and gland] failed to reveal any changes."—R. B. Bromiley.

3388. Pollock, Lewis J., Golseth, James G., & Arieff, Alex J. *The response of muscle to electrical stimuli during degeneration, denervation, and regeneration.* *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 236-257.—This is a brief review of terms and definitions, followed by a summary of changes occurring during degeneration, denervation, and regeneration. The specific points discussed include tetanus, tetanus ratio, strength duration curves, chronaxie, strength frequency curves, polar ratios, progressive current thresholds, and optimum stimulation frequency.—C. E. Henry.

3389. Ray, George B. (*Long Island Coll. Med., Brooklyn, N. Y.*) *The measurement of reduction time of blood in the capillaries of the skin.* *Amer. J. Physiol.*, 1946, 147, 622-629.—A direct method for evaluating the supply of oxygen to the skin by means of a spectroscope is described. The method is based upon the fact that due to the reduction of oxyhemoglobin in the capillaries a definite spectral change can be detected in the light reflected from the skin of the hand upon occlusion of the blood supply. Measurements (time from occlusion to disappearance of oxyhemoglobin bands) are given upon 317 normal subjects.—R. B. Bromiley.

3390. Ray, George B., Johnson, J. Raymond, & Ray, Louise H. (*Long Island Coll. Med., Brooklyn, N. Y.*) *The change in reduction time of blood after breathholding as a criterion of physiological fitness.* *Amer. J. Physiol.*, 1946, 147, 636-646.—A coefficient based upon the reduction time of the blood (see 21: 3389) at rest and after breathholding was calculated for groups of various recognized degrees of fitness. The range of scores varied from a mean of 36.0 on 37 Marines to one of -13.5 on 236 bedridden patients. Following one or two divebombing flights personnel in training showed marked decrease in the coefficient which returned to the previous level by next morning. Reliability (test-retest) of the method is ± 0.81 .—R. B. Bromiley.

3391. Roth, Grace M. (*Mayo Foundation, Rochester, Minn.*), & Sheard, Charles. *Effect of smoking on the vasodilatation produced by the oral administration of 95 per cent ethyl alcohol or a substantial meal.* *Amer. Heart J.*, 1947, 33, 654-662.—Measurement of vasoconstriction and vasodilatation of the extremities was made by determining the skin temperature of the fingers and toes, together with simultaneous observation of blood pressure and pulse rate. Observations were made on 65 normal persons, 6 women and 59 men ranging in

age from 19 to 59,—all being habitual smokers and inhalers. The following results were obtained: vasodilatation which follows ingestion of alcohol does not take place immediately but only after sufficient absorption of the alcohol has occurred (50 to 60 minutes), and once the height of vasodilatation is reached it persists for 1 to 1.5 hours. Smoking after 30 to 90 minutes after ingestion of alcohol or ingestion of food demonstrated that vasoconstriction from smoking could not be prevented by the alcohol or food at any time during vasodilatation from alcohol or food.—*F. C. Sumner.*

3392. Young, William C. (*Cedar Crest Coll., Allentown, Pa.*) **Animal endocrines in relation to sexual behavior.** *Ann. N. Y. Acad. Sci.*, 1947, 47, 609-616.—The author reviews the research studies and their implications on the effects of endocrines on sex behavior. The experimental findings on male animals in the various species studied have few complications. The situation in the female is more complex and is discussed in greater detail. The variability of sex responses, tissue sensitivity, genetic factors, age, etc. are considered. 40-item bibliography.—*S. Ross.*

NERVOUS SYSTEM

3393. Barnes, T. Cunliffe. (*Hahnemann Med. Coll. Philadelphia, Pa.*), & Beutner, R. **Electrogenic properties of acetylcholine.** *Nature, Lond.*, 1947, 159, 307.—The electrogenic action of acetylcholine at the phase boundary between oils and aqueous solutions is discussed as the possible basis of the recorded electrical potential of cholinergic nerve impulses.—*A. C. Hoffman.*

3394. Freeman, W., & Watts, J. W. **Retrograde degeneration of the thalamus following prefrontal lobotomy.** *J. comp. Neurol.*, 1947, 86, 65-93.—On the basis of clinically successful and unsuccessful cases of prefrontal lobotomy which were studied at necropsy the authors conclude that it is possible to designate the areas of the thalamic nuclei which correspond to specific cortical areas in man. They found that the central part of the medial nucleus of the thalamus projects to the frontal pole; the lateral portion, to the convexity; and the medial portion, to the base of the frontal lobe. The anterior nucleus projects to the medial surface of the frontal cortex. The lateral group project to the motor and premotor areas and to the frontal adverse field.—*C. P. Stone.*

3395. Homburger, E., Himwich, W. A., Etsten, B., York, G., Maresca, R., & Himwich, H. E. (*Albany Med. Coll., Albany, N. Y.*) **Effect of pentothal anesthesia on canine cerebral cortex.** *Amer. J. Physiol.*, 1946, 147, 343-345.—Under light and deep anesthesia blood samples were drawn from the exposed superior longitudinal sinuses of dogs. The arteriovenous O_2 difference and cerebral blood flow were obtained and from these the cerebral metabolic rate was calculated. With 7 dogs, the average O_2 intake of the brain fell from 5.9 cc. O_2 per 100 gms. of tissue per minute under light pen-

total anesthesia to 2.6 cc. under deep. Cerebral blood flow fell 22% while the arteriovenous O_2 difference fell 40%.—*R. B. Bromiley.*

3396. Katz, Bernhard. (*University College, London.*) **Subthreshold potentials in medullated nerve.** *J. Physiol.*, 1947, 106, 66-79.—An experimental attack upon the manner "by which impulses are generated in medullated axones" is made by electrical-shock subthreshold stimulation of the frog's sciatic nerve. Results support the view held by Rushton and Katz that a "weak non-conducted response is elicited by subliminal electric stimuli" and make suspect the interpretation of Erlanger and Kato who hold that an impulse "starts at the point of stimulation in an all-or-none fashion".—*L. A. Pennington.*

3397. Kollros, Jerry J. (*U. Iowa, Iowa City.*) **The convulsive effect of penicillin on an amphibian nervous system.** *J. cell. comp. Physiol.*, 1947, 29, 185-188.—Tissue from the spinal cord or medulla of the salamander larvae, when transplanted to the tail fin of another larvae, exhibits "spontaneous convulsive activity" at intervals. Penicillin injections, under controlled conditions, made during these intervals of quiescence in the transplant, are accompanied by violent clonic reactions which terminate in an apparent paralysis. Amphibian and mammalian nerve tissue responds in this manner to penicillin injections, while similar tissue in the cockroach does not. The reasons for this difference are considered theoretically.—*L. A. Pennington.*

3398. Scholl, Donald. (*University College, London, England.*) **Allometry of the vertebrate brain.** *Nature, Lond.*, 1947, 159, 269-270.—Methods of determining the parameters (phylogenetic and cephalization constants) of equations relating brain and body weight are discussed in support of the thesis that the present information is not adequate to describe the relationship between quantitative characteristics of the brain and the phylogenetic or ontogenetic appearance of mental processes.—*A. C. Hoffman.*

3399. Walshe, F. M. R. **On the contribution of clinical study to the physiology of the cerebral motor cortex.** *The Victor Horsley Memorial Lecture.* Edinburgh: E. & S. Livingstone, 1947. Pp. 30. 1s. 6d.—In this lecture, Walshe evaluates and contrasts the respective contributions of experimental and clinical study to our understanding of the motor cortex. The experimentalist has been prone to accept without question the punctate or 'cortical mosaic' theory of localization despite the weight of evidence against it. The clinician on the other hand, relying on nature to make the experiments, has long recognized that such a theory is wholly incompatible with the facts of observation. Representation of movements, as Hughlings Jackson recognized, is multiple in the sense that a given cortical focus must contain the substrate of more than a single movement and that representations of the movements of a given part of the body overlap extensively. The frag-

mentary movements elicited by electrical stimulation of isolated cortical points do not provide a true guide to the nature of integrated cortical activity.—*M. D. Vernon.*

[See also abstracts 3402, 3433, 3448, 3451, 3452, 3463, 3542, 3544.]

RECEPTIVE AND PERCEPTUAL PROCESSES

3400. Foster, Dean (Cornell U., Ithaca, N. Y.), Smith, L. A., & Scofield, E. H. (Joseph E. Seagram and Sons, Inc., Louisville, Ky.) A new dirhinic olfactory stimulator. *Amer. J. Psychol.*, 1947, 60, 272-275.—Some of the objections to the commonly used stimulators are indicated. A "dirhinic" stimulator provides simultaneous stimulation of both nostrils by the same stimulus. A description and sketches of the apparatus are presented. "This stimulator confines its odor up to the instant that it is brought in contact with O's nostrils. It delivers the stimulus at different inhalations at approximately equal intensities since the agitation of the stimulus-liquid is proportional to the depth of inhalation, and the nosepieces prevent leakage when O inhales."—*S. C. Ericksen.*

3401. Hall, Norman B., Jr., & Dallenbach, Karl M. (Cornell U., Ithaca, N. Y.) The duration of the after-sensation of cold aroused by punctiform stimulation. *Amer. J. Psychol.*, 1947, 60, 260-271.—A summary review of the historical work on after-sensations of the temperature sense precedes the experiment proper. A detailed description of the apparatus and procedure used for the five observers is given. A constant stimulus of $18.45^\circ \pm 0.37^\circ \text{C}$ of 1-sec. duration was used. "It is only by practice and training, and not always then as our results show, that an O is able to attend to the after-sensation and to disregard the distractions that appear in the course of its measurement." The obtained results indicate that the greater the intensity of the primary sensation the longer the after-sensation. There was considerable variation in length but the average duration of the after-sensation of colds that were "weak" varied among the O's between 3-8 sec. to the "strong" colds with an average duration of between 16-35 seconds.—*S. C. Ericksen.*

3402. Lee, Wei Yung. (Henry Lester Institute of Medical Research, Shanghai.) Humidity sensations in relation to moisture gradients between clothings. *Chin. med. J.*, 1946, 64, 203-208.—An experiment on the relationship between the moisture gradients between the layers of clothing and the different humidity sensations experienced by the subjects was conducted indoors daily between May and October, 2 men serving alternately as subjects. They were in a prone position before and during the experiment. The clothing worn by each subject consisted of 3 layers, all of cotton material. The results of a total of 44 experiments were: (1) the moisture content between the layers of clothing is closely related to

the wet-bulb temperature of the air with maximum amount of moisture found in the innermost layer and minimum in the outer garment; (2) with higher humidity sensations there was higher moisture content in the air next to the skin and diminution towards the outer garments.—*F. C. Sumner.*

3403. Morales, Manuel F. (U. Chicago, Ill.) Asynchrony of labyrinthine receptors as a physical factor in motion sickness. *Bull. math. Biophys.*, 1946, 8, 147-157.—Asynchrony between various receptors, notably of the semicircular canals and utricles, is held to be one of the major factors inducing seasickness. This asynchrony of labyrinthine receptors is given rise to by the simultaneous roll and pitch motions of the ship.—*F. C. Sumner.*

3404. Scharrer, E., Smith, S. W., & Palay, S. L. Chemical sense and taste in the fishes, *Prionotus* and *Trichogaster*. *J. comp. Neurol.*, 1947, 86, 183-198.—Experiments on the named fishes were performed to determine whether chemical sensitivity evokes only defensive reactions whereas positive food reactions are mediated exclusively by the sense of taste. They found that both types of fishes could give positive food reactions to stimuli affecting only the chemical sense; therefore, they conclude, differentiation between reactions mediated by the chemical as opposed to the gustatory sense must be based on innervation and on the presence of the taste buds at the place stimulated, rather than on the direction of the response, per se.—*C. P. Stone.*

3405. Thorpe, W. H., (Cambridge U., England.) Crombie, A. C., Hill, R., & Darrah, J. H. The behavior of wireworms in response to chemical stimulation. *J. exp. Biol.*, 1947, 23, 234-266.—The behavior of wireworms (*Agriotes lineatus*, *obscurus*, and *sputator*) in relation to food and chemical substances of plant origin was investigated. Included were laboratory experiments using various olfactometer and choice reaction chambers as well as a number of field investigations. No responses to air-borne odors were observed, but orientation in sand filled chambers to the half moistened with extracts of plant tissues was easy to obtain. Orientation in the latter situation is not produced by the same set of substances which elicit biting responses. Biting is elicited by plant juices or solutions containing one or more of a number of carbohydrate, fatty, or protein substances. Orientation is elicited by some of these substances but in addition by aqueous solutions in low concentration of several dibasic acids, amides, and related substances. This difference between the adequate stimuli for biting and orientation and a further difference in threshold values suggests two sense categories comparable to taste and smell in higher animal forms. Thresholds of response are lowered with starvation up to 7 days.—*W. E. Kappauf.*

3406. Tresselt, M. E. (New York U.) The influence of amount of practice upon the formation of a scale of judgment. *J. exp. Psychol.*, 1947, 37, 251-260.—"Two hundred four individuals were called upon to make judgments upon a practice series of

weights which consisted of four heavy weights or four light weights, and then were given an expanded scale of weights. The major results suggest that: 1. The center of the scale of judgment for the expanded range of stimuli will be at first in the direction of the center of the previously existing scale, and then, as the scale approaches the stimulus-range, begins to oscillate. 2. Over a period of time the scales rapidly conform to the stimulus-range regardless of whether or not the practice series contained stimuli at the top or bottom of the expanded scales. 3. There is a definite effect of different amounts of practice upon the first judgment of stimuli in the expanded stimulus-range. The greater the amount of practice, the more slowly does the scale of judgment shift to its new position. 4. Whether there is a prolonged effect of the practice series upon the center of the new scale is questionable. . . ."—D. W. Taylor.

VISION

3407. Bannon, Robert E., & Textor, Rudolph T. (Dartmouth Eye Institute, Hanover, N. H.) Analysis of successful and failure aniseikonic cases; a study of the data in 200 cases. *Amer. J. Optom.*, 1947, 24, 262-276.—Statistical analysis was undertaken of 200 replies to questionnaires by patients for whom aniseikonic lenses had been prescribed. These included 100 cases reporting improvement ("successful group") and 100 reporting persistence of symptoms ("failure group"), selected at random. No significant differences were found in respect to sex, type of symptoms, change in refractive correction, or mixed dominance. The "successful group" was found to include a larger proportion of younger patients, more anisometropes, more whose aniseikonia agreed with that calculated from the degree of anisometropia, more with normal motility, more cases requiring meridional correction, and a considerably larger proportion judged "normal" in respect to psychological characteristics.—M. R. Stoll.

3408. Bitterman, M. E. (Cornell U., Ithaca, N. Y.) Frequency of blinking in visual work: a reply to Dr. Luckiesh. *J. exp. Psychol.*, 1947, 37, 269-270.—Luckiesh's (21: 3425) limitation of the use of blink-rate as a criterion of fatigue to "normal" and "continuous" reading represents a considerable modification of his earlier position. His assertion that whenever conditions similar to his own have been employed the results have agreed "qualitatively" with his own represents "both a misinterpretation and an unwarranted selection of evidence."—D. W. Taylor.

3409. Brown, Robert H. (Clark U., Worcester, Mass.) Complete spatial summation in the peripheral retina of the human eye. *Amer. J. Psychol.*, 1947, 60, 254-259.—Using 3 subjects, a total of 30 threshold-determinations were made for each of 12 circular areas. The relationship between log of threshold-intensity (Y-axis) and log of radius of stimulus-patch (X-axis) is indicated by a straight line with a slope of -2. It is concluded that the

visual threshold is determined by the total quantity of light (area times intensity), when the circular stimulus patch does not exceed 10' to 25' of visual angle in diameter. The findings are interpreted in terms of the results of previous studies and the physiology of the retina.—S. C. Ericksen.

3410. Burian, Hermann M. (520 Commonwealth Ave., Boston, Mass.) Sensorial retinal relationship in concomitant strabismus. *Arch. Ophthalm.*, Chicago, 1947, 37, 618-648.—The third and concluding portion of this paper (see 21: 2887) includes the following sections: origin of anomalous correspondence, critical review of the literature of the last two decades . . . terminological comments, conclusions. The rather caustic criticism of various theories indicates the author's thesis that "only the theory of the subjective visual directions, on the broad foundation of the methods of exact subjectivism, permits a satisfactory understanding of all pertinent phenomena." Confusion between relative spatial localization, to which retinal correspondence exclusively refers, and absolute, egocentric localization must be avoided. All forms of the projection theory of spatial localization maintain this confusion. Normal correspondence is innate; anomalous correspondence is acquired through usage but the mechanism by which it is established remains to be determined.—M. R. Stoll.

3411. Chance, Burton. Experiences in testing color vision of persons with defective color sense. *Arch. Ophthalm.*, Chicago, 1947, 37, 806-808.—Abstract and discussion.

3412. Collins, Arthur W. (Premier Optical Products Co., New York.) The Vectoluminator and Vectometer as a new medium for visual training. *Amer. J. Optom.*, 1947, 24, 172-176.—The Vectoluminator consists of a transilluminating unit and 10 polarized targets designed for testing and training visual performance. In the Vectometer, polarized targets for the 2 eyes are on separate sheets of plastic and one is movable with respect to the other. Convergence or divergence can be stimulated by target movement. Advantages of these devices are pointed out.—M. R. Stoll.

3413. Finger, Frank W., (U. Virginia, Charlottesville.) & Spelt, David K. The illustration of the horizontal-vertical illusion. *J. exp. Psychol.*, 1947, 37, 243-250.—"Seventy-two Ss attempted to equate in length the horizontal and the vertical line in each of four figures. In one figure (C) the horizontal line was bisected by the vertical, in the second (D) the vertical was bisected by the horizontal, and in the other two (A and B) the lines did not intersect. The three predictions underlying the experiment were clearly borne out: 1. The error in C was greater than the error in A; 2. The error in C was greater than the error in D; 3. The error in B was greater than the error in D. The hypothesis on which these predictions were based was thus confirmed: that the error of perception in the inverted T figure is an illustration not simply of the horizontal-vertical

illusion, but of the 'bisected-line' illusion as well." 21 references.—D. W. Taylor.

3414. Fisichelli, V. R. (*Hunter Coll., New York.*) **Reversible perspective in Lissajous figures; some theoretical considerations.** *Amer. J. Psychol.*, 1947, 60, 240-249.—"The results of recent studies of reversible perspective in Lissajous figures point to the possibility, not previously mentioned, that the rate of reversals in these figures is directly related to the amount and rate of stimulation which they provide for a given group of visual nerve cells." Some of the findings examined are: prolonged inspection, complexity of pattern, speed of rotation, dimensional variations, other-than-rotary-movement. These results are also interpreted in the light of the satiation principle of reversibility offered by Kohler and Wallach.—S. C. Ericksen.

3415. Foss, Carl E. (*Princeton U., New Jersey.*) **Tetrahedral representation of the color solid.** *J. opt. Soc. Amer.*, 1947, 37, 529.—Abstract.

3416. Fry, Glenn A., & Alpern, Mathew. (*Sch. Optometry, Ohio State U., Columbus, O.*) **Theoretical implications of the response of a photoreceptor to a flash of light.** *Amer. J. Optom.*, 1946, 23, 509-525.—Jahn's theory (see 20: 3040) of the photosensitive substance is here extended to permit comparison with data reported by Hartline, Graham and Riggs (see 7: 85, 9: 53, 15: 2522) for a single photoreceptor. Values derived from these data were inserted in equations derived from the theory. It is assumed that concentration of the catalyst is of negligible amount and that the end product of the secondary reaction must diffuse to another part of the cell before it initiates an impulse. Explanations are indicated for observations concerning variations in frequency of impulses and in reaction times. It is suggested that a very slow reaction resulting only in changes in adaptation may be initiated by the light stimulus simultaneously with the reaction which results ultimately in sensation. Some such amendment is required to explain the discrepancy between observed dark adaptation time and that predicted by equations derived from the original theory.—M. R. Stoll.

3417. Gallagher, J. Roswell, (*Phillips Acad., Andover, Mass.*), Ludvig, Elek J., Martin, S. Forrest, & Gallagher, Constance D. **Effect of training methods on color vision.** *Arch. Ophthalm.*, Chicago, 1947, 37, 572-582.—45 students with deficient color vision made perfect scores on the pseudo-isochromatic plates after 1 to 13 hours of training on these plates. On the similar Ishihara test, scores were improved except in 2 cases but only 6 made perfect scores. Performance on a desaturation test were not appreciably affected. In this test light passed through a red or green filter (Jena RG1 or BG7, 2 mm.) and a neutral wedge is added to unfiltered light of constant intensity. The wedge is moved to permit higher transmission until the subject makes 20 consecutive correct identifications. Ratings for the color deficient group overlapped those for a normal group but there was a correlation

of 0.82 with initial pseudo-isochromatic test ratings for 111 normal and 49 color deficient subjects. 6 color deficient subjects who were not subjected to other color training were trained on this test. Performance of 5 subjects then fell within the normal range, but performance on the pseudo-isochromatic and Ishihara tests was not appreciably improved. Neither type of training appears to improve color discrimination except in the training situation and even such improvement does not appear to be permanent.—M. R. Stoll.

3418. Gordon, Donald A. (*Columbia U., New York.*) **The relation between the thresholds of form, motion, and displacement in parafoveal and peripheral vision at a scotopic level of illumination.** *Amer. J. Psychol.*, 1947, 60, 202-225.—Using a constant scotopic brightness-level, a comparison was made of the thresholds of form, motion, and displacement in the periphery of the retina. 5 subjects having superior scotopic vision were tested on 8 to 12 retinal points, ranging from 2° to 50° of peripheral angle. The same stimulus-object was used throughout—a Landolt ring modified for rotary motion. The combined data indicate that the threshold of form is approximately equal to that for displacement. The motion-threshold rate is proportional to the form-threshold size at all retinal positions. A physiological interpretation is given for the findings.—S. C. Ericksen.

3419. Hecht, Selig, (*Columbia U., New York.*), Ross, Sherman, & Mueller, Conrad G. **The visibility of lines and squares at high brightness.** *J. opt. Soc. Amer.*, 1947, 37, 500-507.—Judgments of the presence or absence of a fine wire, silhouetted against a bright sky, can be made with 75% certainty when the diameter of the wire subtends an angle of 0.43 sec. at the eye. The minimum length of wire subtends an angle of about one degree at the eye; below this minimum length the threshold rises rapidly. Sunglasses of neutral tint, having a transmission of 12%, were worn in some of the observations and did not alter the results. The presence of a silhouetted square can be recognized with a consistency of 75% when one side subtends a visual angle of 14 seconds. Sunglasses affect adversely the recognition of a target when the brightness is reduced to a level of about 500 millilamberts or below.—L. A. Riggs.

3420. Jones, Loyd A., & Higgins, George C. (*Kodak Research Laboratories, Rochester, N. Y.*) **Photographic granularity and graininess. III. Some characteristics of the visual system of importance in the evaluation of graininess and granularity.** *J. opt. Soc. Amer.*, 1947, 37, 217-263.—A survey of the literature and a critical analysis are made of the pertinent characteristics of human vision. On the basis of existing knowledge it is concluded that the threshold value of graininess is a property of the activity of a relatively small number (<1500) of cone receptors located at the center of the fovea. When a granular field is fixated, the rapid, oscillatory eye movements of the physiological nystag-

mus causes changes of illuminance on the individual cones within this region of the retina. It is assumed that the time rate of change of illuminance determines the pattern of nerve impulses initiated by the cones, and hence the threshold of perceived graininess. On the basis of this analysis, instruments and samples are proposed for the establishment of a standard scale of graininess. The scale is to be calibrated by a psychophysical determination of just noticeable differences in graininess.—L. A. Riggs.

3421. Köhler, Wolfgang, & Emery, David A. (Swarthmore Coll., Pa.) **Figural after-effects in the third dimension of visual space.** *Amer. J. Psychol.*, 1947, 60, 159-201.—Experimentation is continued on the phenomenon called "figural after-effects." It has been shown that if part of a visual field has for some time been occupied by a figure, other figures which are afterwards shown in about the same region will generally be displaced or distorted. The present experiment shows that these effects occur in the third dimension as well as in the frontal plane. The procedures used in a series of experiments are described. The results are interpreted and compared to those obtained in other investigations. Such after-effects are interpreted as operating in depth perception in addition to cues of visual disparity. "From the existence of localized figural after-effects in the third dimension, it is concluded that visual depth is a sensory fact."—S. C. Ericksen.

3422. Koomen, M. J., Knoll, H. A., & Tousey, R. (U. S. Naval Research Laboratory, Washington, D. C.) **An infra-red pupillometer.** *J. opt. Soc. Amer.*, 1947, 37, 527.—Abstract.

3423. Lambercier, Marc. (U. Geneva, Switzerland.) **La constance des grandeurs en comparaisons sérielles.** (Size constancy in serial comparisons.) *Arch. Psychol., Genève*, 1946, 31, 79-282.—An evolution with age toward almost absolute size constancy is shown, with possible variation within age groups. After a statement of the problem and its history, experimental data are presented involving the kinds of objects compared, distance, visual field, height, position of objects and their lateral and vertical distribution, sensory motor factors, the influence of repetition, various techniques and their results, errors and their effects, and the relation between fixed and moving serial comparison. 125-item bibliography.—G. E. Bird.

3424. Le Grand, Y. (Museum d'Histoire Naturelle, 57 rue Cuvier, Paris), & Guillemot, E. **Measurement of visual acuity with blurred tests.** *Nature, Lond.*, 1947, 159, 132-133.—Letters printed on transparent slides were projected upon a diffusion screen which was systematically put out of focus. Plots of the apparent diameter of the diffusion circle (abscissa) against the minimum angle subtended by the heights of the letters when just recognized (ordinate) are presented for each of the five letters used. Various degrees of resistance (from least to greatest: M, R, V, C, O) to blurring are indicated. It is suggested that Snellen's letters might be classi-

fied on the basis of their resistance to blurring.—A. C. Hoffman.

3425. Luckiesh, Matthew. (General Electric Company, Nela Park, Cleveland, O.) **Reading and the rate of blinking.** *J. exp. Psychol.*, 1947, 37, 266-268.—Bitterman (19: 3315; 20: 3070), Hoffman (20: 3110), and Tinker (20: 570; 21: 703) have conducted experiments which show that rate of blinking is not a valid measure of visual fatigue. Several of these experiments are to be criticized, however, in that the procedure used involved not "normal reading but a critical examination of printed matter with the attendant requirements for speed and accuracy." Moreover, in the two experiments which employed procedures similar to those used by the present writer, "the experimental results agreed qualitatively. . . . Therefore, none of the tests conducted by Tinker, Bitterman or Hoffman detracts from the validity of the blink-rate as a criterion of ease of seeing."—D. W. Taylor.

3426. Martin, L. C. (Imperial Coll., London), & Kaniowski, W. **Flash visual acuity.** *Nature, Lond.*, 1947, 159, 25-26.—Visual stimuli of the 'double star' type were presented to an observer over a relative range of intensities of about 50:1 and for exposure times ranging from 700 to 5 msec. After each flash exposure the observer had to report whether the seen object was single or double. A graph of 50% thresholds is presented "in which the log of 'visual limiting angle times duration of stimulus' is plotted against the log of 'brightness of source.' . . . The results appear to be consistent with the accepted view that acuity is associated with intensity discrimination, but also lead back to the idea that this discrimination is associated with the production of some minimum difference of concentration of photo-products in adjacent areas of the retina."—A. C. Hoffman.

3427. Morgan, Meredith W. (U. California, Berkeley.) **The nature of ametropia.** *Amer. J. Optom.*, 1947, 24, 253-261.—Ametropia may be classified as axial or refractive, with the latter class subdivided into ametropia due to index of refraction of ocular media, curvature of cornea and lens, or distance between these affecting location of principal planes. Any functional ametropia would necessarily be of the curvature type. Not more than about 28% of non-astigmatic errors appear to be of this kind according to evidence from various independent investigations. Association of increasing myopia with increased near work may result merely from the fact that more close work is often undertaken at about the age when myopia tends to increase; the claim of dependence is not well founded. Stability of relations between accommodation and convergence also argues against the view that myopia is often functional, since excessive convergence is not found with developing myopia.—M. R. Stoll.

3428. Palmer, Martin F. (U. Wichita, Wichita, Kans.) **Studies in clinical techniques.** *J. Speech Disorders*, 1947, 12, 83-84.—A test for the determination of eye dominance is described. Using a stand-

ard clinical head mirror and establishing proper situational rapport, and . . . with both examiner and subject keeping both eyes open the child is asked simply to point at the hole in the mirror. The examiner then sights through the peep-hole over the pointing finger to the subject's eye, places his hand back of the finger so as to cut off the lines of vision and instructs the patient to again shift his finger so that it is pointing at the hole in the head-mirror. Removing his hand from the line of vision the subject is directed to again point at the peep-hole and the line of sight swings back to the preferred eye. An alternate technique is also given.—M. A. Seidenfeld.

3429. Pickford, R. W. (U. Glasgow, Scotland.) **Binocular colour combinations.** *Nature, London.*, 1947, 159, 268-269.—All possible paired-combinations of nine colors (Ilford monochromatic filters) were stereoscopically presented to an experienced observer with normal color vision who rated the degree of fusion on a scale of 0 to 1. It was concluded from a factor analysis (summation method) of the data that all colors have a strong combining tendency (general factor), complementary colors are very difficult to combine (both bipolar factors), and bright colors are difficult to combine with dark (second bipolar factor). It is believed that these results support a four-color theory of the Hering type and cast doubt on the theory that all color combinations take place at a single locus in the brain and not in the retina.—A. C. Hoffman.

3430. Riggs, L. A., Mueller, C. G., Graham, C. H. & Mote, F. A. (Brown U., Providence, R. I.) **Photographic measurements of atmospheric boill.** *J. opt. Soc. Amer.*, 1947, 37, 415-420.—Optical shimmer or "boill" effects are measured photographically and are shown to contribute to the usual errors of observation. Since the amount of shimmer appearing in a telescopic image is directly related to the magnification, there is no advantage to be gained from high degrees of magnification when shimmer is present. This is particularly true of observer performance in a stereoscopic rangefinder, where two independently shimmering images are shown to be present.—L. A. Riggs.

3431. Sharpley, F. W. (Oxford U., England.) **Relation between illumination and extent of the visual field.** *J. Physiol.*, 1946, 105, 215-222.—To determine the extent of the monocular field of vision at different illuminations ranging from 7 f. c. to .00008 f. c., the visual sensitivities of one man and three women were studied. A 1' test-object on a Lister perimeter of 330 mm. radius was employed under controlled conditions. Significant results include the small variation in visual field with reduced illumination (as low as .0004 f. c.), and the contraction at the lowest illumination level (.00008 f. c.) as related to the size of the subject's visual field when completely dark-adapted. These and other findings are related to visual theory of rod and cone functions.—L. A. Pennington.

3432. Sloan, Louise L., & Wollach, Lorraine. (Johns Hopkins U. Sch. Med., Baltimore, Md.) **A case of unilateral deuteranopia.** *J. opt. Soc. Amer.*, 1947, 37, 527.—Abstract.

3433. Thomson, L. C. (Guy's Hosp., London.) **Binocular summation within the nervous pathways of the pupillary light reflex.** *J. Physiol.*, 1947, 106, 59-65.—"Does simultaneous stimulation of the retina of both eyes give rise to a greater response than stimulation of one eye only?" The aim of this study has been to determine if afferent summation occurs when pupillary contraction is measured in the dark-adapted human eye. Results indicate that pupillary constriction is less for monocular stimulation than for binocular and that this summation, uninfluenced by cortical activity, occurs "perhaps in the lateral geniculate body."—L. A. Pennington.

3434. Volk, David, & Fry, Glenn A. (School of Optometry, Ohio State U., Columbus O.) **Effect of quality of illumination and distance of observation upon performance in the Ishihara test.** *Amer. J. Optom.*, 1947, 24, 99-122.—5 normals, 4 deuteranomalous, 1 deuteranope, 1 protanomalous, and 2 protanopes were tested with respect to various factors. The Ishihara test character is within foveal limits only when viewed at more than 1 meter. Therefore central and parafoveal luminosity curves were determined. The proportion of red light required to match a green was also recorded. Mixtures of red and green of equal subjective brightness were matched with yellow with fixation on the dividing line between the matched squares and also with fixation at the center of 1 of the squares. Upper and lower limits are given for the range that constituted a match. Responses of the anomalous observers are discussed in some detail. The evidence does not explain characteristics of the responses of the deuteranomalous and deuteranopic subjects; these all showed improved performance when the test was given at far distance, exact distances not being specified.—M. R. Stoll.

3435. Wolf, Ernst. (Harvard U., Cambridge, Mass.) **Effects of ultraviolet radiation on visual thresholds.** *Science*, 1947, 105, 366.—Dark adaptation data are reported for humans and chicks where the subjects were pre-adapted under 2 conditions: with and without ultraviolet radiation. In both conditions the eyes were light adapted for 10 minutes with a large adapting field; in one condition wave lengths down to 285 m μ were present, in the other all ultraviolet was filtered out. No differences in subsequent dark adaptation were observed for the cone portions of the curve but the threshold was raised for the rod portions: 0.25 log units for the human data and 1.3 log unit for the chick data.—F. A. Mote.

AUDITION

3436. Békésy, Georg v. (Budapest, Hungary.) **The variation of phase along the basilar membrane with sinusoidal vibrations.** *J. acoust. Soc. Amer.*, 1947, 19, 452-460.—An optical method of measuring phase and amplitude relations in the cochlea when

it is stimulated is described. When the stapes has been put into sinusoidal vibration, a traveling wave is set up along the cochlear partition. Although the form of the amplitude relations at any point on the basilar membrane resembles a resonance curve, the nature of the phase relations indicates that the resonance is not that of a simple vibrating system. Measurement of these relations was made for frequencies under 300 c.p.s. and curves showing the longitudinal bending of the cochlear partition for a tone of 200 c.p.s. at two moments in time is derived. With increasing amplitude of movement at the stapes, the stiffness of the cochlear partition increases, so that the amplitude of vibration at the basilar membrane is not linearly related to the amplitude at the stapes. The basilar membrane cannot be released from tension since it is not normally under tension; only the elasticity of the basilar membrane changes throughout the length of the cochlear canal.—*W. R. Garner.*

3437. **Eagleson, Halson V.** (*Morehouse and Clark Colleges, Atlanta, Ga.*), & **Eagleson, Oran W.** Identification of musical instruments when heard directly and over a public-address system. *J. acoust. Soc. Amer.*, 1947, 19, 338-342.—3 groups of observers were asked to identify 9 musical instruments when a single note was heard either directly or over a public-address system. The groups had either no, some, or considerable musical training. All average identifications were low, but were a little lower for non-musicians than musicians, and a little lower when the instruments were heard over the public-address system. Cymbals, violins, trumpets, and bells were identified best; piccolos and alto horns poorest.—*W. R. Garner.*

3438. **French, N. R.**, & **Steinberg, J. C.** (*Bell Telephone Laboratories, New York.*) Factors governing the intelligibility of speech sounds. *J. acoust. Soc. Amer.*, 1947, 19, 90-119.—"The characteristics of speech, hearing, and noise are discussed in relation to the recognition of speech sounds by the ear. It is shown that the intelligibility of these sounds is related to a quantity called articulation index which can be computed from the intensities of speech and unwanted sounds received by the ear, both as a function of frequency. Relationships developed for this purpose are presented. Results calculated from these relations are compared with the results of tests of the subjective effects on intelligibility of varying the intensity of the received speech, altering its normal intensity-frequency relations, and adding noise."—*W. R. Garner.*

3439. **Gardner, Mark B.** (*Bell Telephone Laboratories, Murray Hill, N. J.*) Short duration auditory fatigue as a method of classifying hearing impairment. *J. acoust. Soc. Amer.*, 1947, 19, 178-190.—The masking effect of a tone extends for a short time after the tone is stopped, and the amount of masking is dependent on the time relations, intensity, and frequency. If one tone is used to mask another tone of higher frequency, no masking will occur with low intensities, but eventually masking

will be linearly related to intensity. The shape of this masking function can be used to classify types of deafness with a monaural test. If the shape of the masking function is not changed (with respect to the normal curve) but is simply displaced, masking is of the conductive type. If, however, the shape of the masking function is changed from that of the normal curve, then deafness is of the nerve type. In-between cases can also be classified with this technique.—*W. R. Garner.*

3440. **Howard, John Clair, Jr.** Auditory impairment in returned service personnel. *J. Mo. med. Ass.*, 1946, 43, 762-765.—The most common physical disability resulting from World War II is impaired hearing. This hearing loss may be divided into the apparent and the latent types. The apparent type is easily discoverable by routine spoken and whispered voice tests, but the latent type which is confined to a loss in hearing for high frequencies lies outside of the conversational range. This latent type of hearing loss has to be discovered by means of an audiometric test. If a person with hearing loss for high frequencies is subjected to a noisy environment, the hearing loss tends to spread over into the conversational range. A routine audiometric check should be given returning veterans before they are employed where the employment will subject them to more than the minimal amount of noise. Unrelated symptoms such as vertigo, nervousness, nausea, gastrointestinal symptoms may be produced in case of minimal deafness with associated tinnitus.—*F. C. Sumner.*

3441. **Kobrak, H. G.** (*U. Chicago, Ill.*) Observation of cochlear structures during the process of hearing. *J. acoust. Soc. Amer.*, 1947, 19, 328-331.—A method is described for photographing the movements of the middle ear structures and the intracochlear fluid in fresh human cadavers. An interrupted light is focussed on the middle ear bones and motion pictures are taken. In order to take pictures of the intracochlear fluid, the transparency of the round window membrane is increased by massaging with a mixture of potassium iodide, glycerin, and water.—*W. R. Garner.*

3442. **Maxfield, J. P.**, & **Albersheim, W. J.** (*Bell Telephone Laboratories, Murray Hill, N. J.*) An acoustic constant of enclosed spaces correlatable with their apparent liveness. *J. acoust. Soc. Amer.*, 1947, 19, 71-79.—The quality of liveness is identified with acoustic properties which determine reverberation time. The acoustic constant of liveness represents the ratio of the integrated reverberant sound energy to the unintegrated energy density of the direct sound. Liveness is found to be related not only to esthetic qualities but also to articulation efficiency. Several subjective phenomena related to liveness are mentioned.—*W. R. Garner.*

3443. **Miller, G. A.**, & **Mitchell, S.** (*Harvard U., Cambridge, Mass.*) Effects of distortion on the intelligibility of speech at high altitudes. *J. acoust. Soc. Amer.*, 1947, 19, 120-125.—When microphones are used at high altitudes their intensity output and

frequency response change, with a consequent loss in speech intelligibility. Tests were made to determine the effects of amplitude and frequency distortion on intelligibility of speech at high altitudes. Frequency distortion has little effect, but peak-clipping of the transmitted speech improves intelligibility due to the increased average power and more favorable signal-to-noise ratio obtained. Some high- and low-pass filtering with peak clipping is desirable.—W. R. Garner.

3444. Neu, D. M. (Indiana U., Bloomington.) A critical review of the literature on "absolute pitch." *Psychol. Bull.*, 1947, 44, 249-266.—The purpose of this paper is to criticize the definitions, theories and experiments relating to absolute pitch from an interbehavioral standpoint. The experimental findings are considered and several conclusions are reached. 58-item bibliography.—S. Ross.

3445. Reger, Scott N., (U. Iowa, Iowa City.) & Newby, Hayes A. A group pure tone hearing test. *J. Speech Disorders*, 1947, 12, 61-66.—A mechanically interrupted group pure tone hearing test is described. In preliminary experimentation 238 subjects were tested, 34 of whom were advised to make appointments for a thorough medical examination of their auditory mechanism, and an additional 38 directed to obtain an individual pure tone audiometric test. The results of the retest were used in studying the reliability of the group pure tone test. "The statistic employed in studying the validity and reliability of the group test was the mean deviation in decibels at each frequency of one test from another . . . there are significant differences between validity and reliability for only two frequencies—2048 cycles and 4096 cycles—and these differences are accounted for by the extremely high reliability of the group pure tone test at the two higher frequencies. The reliability of the group test . . . is apparently satisfactory compared with reliability of individually administered pure tone tests."—M. A. Seidenfeld.

3446. Shaw, W. A., (U. Pennsylvania, Philadelphia), Newman, E. B., & Hirsh, I. J. The difference between monaural and binaural thresholds. *J. exp. Psychol.*, 1947, 37, 229-242.—"The absolute threshold for pure tones is lower when both ears are stimulated than when either ear is stimulated alone. The normal summation at threshold is a function of the relative sensitivity of the two ears. For a group of listeners with substantially normal hearing in both ears, the binaural threshold is from one to two db. lower than the best monaural threshold. Somewhat greater summation can be shown if the two ears are arbitrarily equated by first determining their respective monaural thresholds and then decreasing the tone proportionately below the threshold of each. The maximum summation present in this case is about 3.6 db. There is limited evidence that the amount of summation is greater at some frequencies than at others. This finding, however, should not be accepted without further check. The binaural threshold for speech intelligibility behaves

in the same manner as does the binaural threshold for pure tones. When the two ears are presented with speech which is functionally equal in intensity, the binaural threshold is approximately three db. lower than that of either ear alone."—D. W. Taylor.

3447. Sivian, L. J. (Bell Telephone Laboratories, Murray Hill, N. J.) On hearing in water vs. hearing in air. *J. acoust. Soc. Amer.*, 1947, 19, 461-463.—A theoretical discussion shows that an observer submerged in water should have a 45-55 db. loss in audibility for a 1000 c.p.s. tone in the air above the water as compared to his in-air audibility. Measurements with three observers at frequencies of 1000 and 3000 c.p.s. show threshold losses of approximately this value. No account is taken of noise due to listener's propulsion through water.—W. R. Garner.

3448. Tunturi, Archie R. (U. Oregon Med. Sch., Portland.) A study on the pathway from the medical geniculate body to the acoustic cortex in the dog. *Amer. J. Physiol.*, 1946, 147, 311-319.—Alternating electrical stimulation of symmetrical groups of fibres in both auditory nerves in 15 dogs reveals periods of absolutely unresponsiveness of 20-100 msec. and a relatively refractory period of 100-250 msec. in the potentials evoked in the auditory cortex. These times are the same as those obtained at the cortex upon successive stimulation of the same point of one cochlea. The response in each hemisphere corresponds in latency, wave form, initial sign, and duration. The contralateral response is slightly greater than the ipsilateral one. Similar periods of unresponsiveness were found in recording from the auditory radiations and the medial geniculate body but peripheral to that no unresponsive periods for successive stimulation of the same point were found of greater duration than 1-2 msec. In the third auditory area such stimulation evoked only addition of potentials. These data are evidence for the existence of a neuron common to both ears and reaching the cerebral cortex of all three auditory areas. The relationship of these findings to auditory localization by phase differences is discussed.—R. B. Bromiley.

3449. Wiener, Francis, M. (Bell Telephone Laboratories, Murray Hill, N. J.) On the diffraction of a progressive sound wave by the human head. *J. acoust. Soc. Amer.*, 1947, 19, 143-146.—A probe microphone was used to measure the intensity of sounds at the entrance to the ear canal in the frequency range from 200 to 6000 c.p.s. when the observer was in a free field. A range of azimuths of the sound source of 360 degrees was covered in 45 degree steps. From these data, the ratio of the sound intensity at the two ears can be computed for different azimuth positions. This ratio increases as the frequency is increased, and the measurements agree quite well with measures of the absolute threshold as a function of azimuth position of the sound source.—W. R. Garner.

3450. Wishart, D. E. S. (University of Toronto Faculty of Medicine, Toronto, Canada.) Practical

methods of testing hearing for hospitals and offices. *Canad. med. Ass. J.*, 1946, 55, 567-571.—Not only variations in techniques but more especially variations in acoustical conditions under which hearing tests are administered make for serious lack of uniformity in reports of hearing losses. A relatively simple set up yielding accurate results but involving low initial cost and small operating expense is described. The essential is a sound-proof room equipped with a pure tone audiometer, a gramophone audiometer, and a masker. Measurements are in terms of decibels, and the ears are tested separately.—*F. C. Sumner.*

[See also abstracts 3337, 3339, 3472, 3590, 3633, 3752, 3754, 3758.]

RESPONSE PROCESSES

3451. Brooks, Chandler McC. (*Johns Hopkins U. Sch. Med., Baltimore, Md.*) The relative importance of changes in activity in the development of experimentally produced obesity in rats. *Amer. J. Physiol.*, 1946, 147, 708-716.—The activity of normal rats and rats with obesity and non-obesity producing hypothalamic lesions was recorded by means of running wheel and tambour supported activity cages. The obese rats, unlike the controls, were practically as active during the day as at night. The control lesions produced diminished activity but not obesity. Immediately following the operation there was generally a 12-48 hour period of hyperactivity followed by a similar period of quiescence, then a gradual increase in activity, as recorded by the tambour cages, which finally exceeded the preoperative level. This occurred while the animals were still gaining weight and at the time when the increased weight made all movement extremely energy consuming. As the static period of obesity developed, activity and food intake decreased. At senescence food intake activity and body weight decreased. The increased appetite following specific hypothalamic lesions is the primary factor in the development of obesity but the over-all reduction of activity contributes to the weight gain.—*R. B. Bromiley.*

3452. Brooks, Chandler McC., Lockwood, Richard A., & Wiggins, Milton L. (*Johns Hopkins U. Sch. Med., Baltimore, Md.*) A study of the effect of hypothalamic lesions on the eating habits of the albino rat. *Amer. J. Physiol.*, 1946, 147, 735-741.—The effects of obesity producing hypothalamic lesions on the time of eating and the amount eaten per meal were determined. Immediately after making of the lesions rats showed an increased average size of meal and changed to eating more during the day than the night. The intensity of the hyperphagia gradually decreased as the static phase of obesity developed. Surgical reduction of the size of the stomach reduced the amount eaten per meal but increased the frequency of eating. Bilateral vagotomy increased the variability of meal size and time of eating.—*R. B. Bromiley.*

3453. Child, Irvin L., & Grosslight, Joseph H. (*Yale U., New Haven, Conn.*) The effect of substitute activity as depending upon the nature of the similarity between substitute and original activity. *Amer. J. Psychol.*, 1947, 60, 226-239.—Three groups of 39 feeble-minded children differed as to type of interpolated activity: (1) similar acts in substitute and original activity, goals considerably different; (2) similar goals, acts different; and (3) a control activity, with little similarity of any kind. These interpolated functions were followed by opportunity for resumption of the original activity. The hypothesis was confirmed in that the group that had experienced success in a similar-act substitute showed a greater tendency to resume than did the group that had experienced success in a similar-goal substitute. The control group was intermediate though lacking statistical reliability. The over-all results are in line with previous findings and interpretations by Nowlis.—*S. C. Ericksen.*

3454. Cuthbertson, D. P., & Knox, J. A. C. (*U. Glasgow, Scotland.*) The effects of analeptics on the fatigued subject. *J. Physiol.*, 1947, 106, 42-58.—Laboratory and field studies, sponsored by the Medical Research Council, are reported whereby the effects of benzedrine and methedrine upon fatigue in simulated military situations are measured. Results preclude indiscriminate prescription of these drugs to large groups of men consequent to the divergent effects on mood and judgment. Oral administration of either drug, however, increases output on the ergometer with methedrine 1.5 times as potent as benzedrine.—*L. A. Pennington.*

3455. Edwards, A. S. (*U. Georgia, Athens.*) Body sway and non-visual factors. *J. Psychol.*, 1947, 23, 241-254.—Non-visual conditions affecting body sway are investigated. It is concluded that: (1) external stimulation of the human organism tends to increase body sway and seldom or never to decrease it; (2) standing on one foot greatly increases body sway and especially so when the eyes are closed, indicating the comparatively great effect of vision on body steadiness; (3) stance makes a great difference in body steadiness, and standing on a box decreases steadiness considerably; (4) a 40 pound pack affects the steadiness of men significantly and that of women greatly; (5) smell stimuli and music appear to have some effect upon body sway—music somewhat more than odors; (6) smoking fails to show any definite effect upon body sway; (7) eating the evening meal may improve body steadiness a little and practice of a nearly automatic act may reduce body sway; (8) several questions arise suggesting the need for further experimental work.—*M. Mercer.*

3456. Friedemann, Theodore E., & Andrew, C. Ivy. (*Northwestern U. Med. Sch., Chicago, Ill.*) Work at high altitude. I. Plan of study and methods. *Quar. Bull. Northwest. Univ. med. Sch.*, 1947, 21, 31-44.—7 men, 22 to 27 years of age, received over a period of 16 months a basal diet, and were maintained at weight equilibrium by prescribed

exercises and various quantitative work tests. The work output was determined on the bicycle ergometer 3 times each week at ground level and 2 times at a simulated altitude of 15,000 feet. The results of this experiment on the effect of high altitude upon working efficiency will be reported in subsequent papers.—F. C. Sumner.

3457. Frisch, Karl von. Die "Sprache" der Bienen und ihre Nutzenanwendung in der Landwirtschaft. (The "language" of the bees and its utilization in agriculture.) *Experientia*, 1946, 2, 397-404.—Honey bees finding a feeding place report the discovery by means of dancing. The species of flowers discovered is indicated by the flower-scent adhering to their bodies and by the scent of nectar within the honey stomach. Bees collecting at a feeding place nearer than 50 to 100 m. make round dances. Bees coming from a feeding place more distant make a tail-wagging dance which at the same time gives a very exact knowledge of the distance by the number of turnings. The way to the feeding place is indicated by the direction of the straight run across the circle.—F. C. Sumner.

3458. Galt, William E. (The Lifwynn Foundation, Westport, Conn.) Sex behavior in primates. *Ann. N. Y. Acad. Sci.*, 1947, 47, 617-630.—Primate sex behavior is discussed under the following headings: sexual cycle, time of ovulation, sexual receptivity, copulatory behavior, relationship of dominance to sex, innate organization of the mating pattern and bisexual behavior. 44-item bibliography.—S. Ross.

3459. Jones, H. E. (U. California, Berkeley.) Sex differences in physical abilities. *Hum. Biol.*, 1947, 19, 12-25.—The physical performances (on dynamometer and other tests) of 89 boys and 87 girls from Oakland, California schools were studied at one-half year intervals from ages of 11 to 17.5 years. In general, "average sex differences in static dynamometric strength" can best be accounted for on a biological basis. That this can be somewhat altered by differential practice and training is noted.—L. A. Pennington.

3460. Kinsey, Alfred C. (Indiana U., Bloomington.) Sex behavior in the human animal. *Ann. N. Y. Acad. Sci.*, 1947, 47, 635-637.—A short review of some of the findings of an extensive case history study of human sexual behavior is presented. At the present time 10,500 histories are at hand based upon first hand interviews with persons "of wide social range, of all ages, and a diversity of educational, occupational, religious, and rural-urban backgrounds."—S. Ross.

3461. Kritzer, J. (225 W. Adams Blvd., Los Angeles, Calif.) Hypnotism—a psychological degradation. *J. nat. med. Soc.*, 1946, 2, 142-146.—Recent revival of interest in hypnotism gives occasion for this review of the history of hypnotism and for an evaluation of the effects of hypnotism upon the mind of subjects. The author sees hypnotism rendering subjects more highly suggestible, exposing them to unconscious communication of the hyp-

notizer's own psychic miasm, paralyzing their will-power, self-reliance and sense of discrimination, in a word degrading them psychologically and morally. "In times like these when the very atmosphere is charged with a sort of mass-hypnosis of totalitarian ideologies, political demagoguery, pseudo-religious revivalism and salesmanship psychologies, sober and independent thinking is more vital than ever."—F. C. Sumner.

3462. Román-Goldzieher, K. Untersuchung der Schrift und des Schreibens von 283 Zwillingspaaren. (Investigations of the script and writing of 283 twins.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1945, No. 6, 29-55.—Previous investigations have found the handwritings of twins to differ more than those of average school classmates. Their handwriting should provide an insight into developmental problems, particularly those associated with heredity and environment. The majority of the 283 pairs of twins observed showed a tendency to mirror-handedness within the pair—one with right and one with left-handed signs. 73% of the identical twins in the sample showed this tendency. Speed of writing shows more hereditary influence than pressure or letter form. Samples of writing were analyzed quantitatively and qualitatively from a number of points of view. It is concluded that handedness is a basic factor in personality development.—R. B. Ammons.

[See also abstracts 3403, 3498, 3500, 3769, 3776.]

COMPLEX PROCESSES AND ORGANIZATIONS

LEARNING AND MEMORY

3463. Allen, William F. (U. Oregon Med. Sch. Portland.) Effect of bilateral destruction of three lateral cerebral cortical areas on correct conditioned differential responses from general cutaneous stimulation. *Amer. J. Physiol.*, 1946, 147, 454-461.—In dogs cortical areas A, B, and C were ablated bilaterally. Two cutaneous CRs were studied. The positive CS in each case was brushing the back with the grain at 1/sec. The negative CSs were brushing with the grain at 3/sec and against the grain at 1/sec. Ablation of: areas A and B produced no effect; of area C caused loss of the differential CR and retarded reestablishment; of areas B and C prevented relearning but an auditory differential CR could be established. Unilateral removal of B and C produced no effect. None of the lesions retarded the formation of, or altered, the positive CR. The effect upon the cutaneous differential CR was a loss of "correct inhibition."—R. B. Bromiley.

3464. Buswell, G. T. (U. Chicago, Ill.) Perceptual research and methods of learning. *Sci. Mon.*, N. Y., 1947, 64, 521-526.—The 2 principal factors which influence perception in reading are the perceptual organization of the material being read and the degree of freedom from vocalization in the reading process. Examination of the experimental data,

including a study of 465 pupils in matched pairs from the Chicago grade schools, indicates the superiority of the silent-reading process over the customary vocalization technique. "Reading is a process of direct association between perceptual stimulus and meaning without any intervening subvocalization . . . of thinking the meaning rather than saying the words."—*E. Girden.*

3465. Felsing, John M., (Yale U., New Haven, Conn.) Gladstone, Arthur I., Yamaguchi, Harry G., & Hull, Clark L. Reaction latency (s_R) as a function of the number of reinforcements (N). *J. exp. Psychol.*, 1947, 37, 214-228.—"Fifty-nine male albino rats were trained by distributed trials to make a simple bar-pressing movement until each organism was well beyond its reaction-latency asymptote, and the resulting latencies were measured. The object of the investigation was to determine the molar law according to which reaction latency varies with the number of reinforcements uniformly following conditioned-reaction evocation." Both mean and median reaction latencies were plotted as a function of number of reinforced reaction evocations for both raw and Vincetized data. In all 4 cases, a power function of the general form, $s_R = aN^{-b} + c$, was obtained. Of these constants, the coefficient a represents the maximal conditioned reaction latency, the exponent b the rate of decrease of s_R as N increases, and the constant c the physiological limit of latency.—*D. W. Taylor.*

3466. Hall, Tom Aldis. An investigation of a possible temporal aspect of a learning determination. In *University of Oklahoma, Abstracts of theses . . .* 1940. Norman, 1947. Pp. 16-27. (Univ. Okla. Bull., 1947, No. 970.)—Abstract of Ed.D. thesis.

3467. Kellogg, W. N. (Indiana U., Bloomington.) Is 'spinal conditioning' conditioning? Reply to 'a comment.' *J. exp. Psychol.*, 1947, 37, 263-265.—Five points are listed which must be adequately explained if what Shurrager (21: 3468) describes as spinal conditioning is to be accepted as conditioning.—*D. W. Taylor.*

3468. Shurrager, P. S. (Illinois Inst. Technology, Chicago.) A comment on 'an attempt to condition the chronic spinal dog.' *J. exp. Psychol.*, 1947, 37, 261-263.—The responses obtained in an earlier study (14: 2337) with acute spinal dogs met 4 criteria of conditioning and "may therefore justifiably be called *spinal conditioned responses*, rather than striated components of the startle response facilitated by reflex sensitization, as Kellogg *et al.* (21: 2928) suggest." Their failure to obtain spinal conditioning with chronic preparations may have been due to certain aspects of the technique which they employed. (See 21: 3467).—*D. W. Taylor.*

3469. Sprow, Allen J. (Yale U., New Haven, Conn.) Reactively homogeneous compound trial-and-error learning with distributed trials and terminal reinforcement. *J. exp. Psychol.*, 1947, 37, 197-213.—"In a four-choice-point linear maze with four doors at each choice point, 40 albino rats were trained to choose the same door at each choice point

(homogeneous form of compound trial-and-error learning) for food reinforcement at the posterior end of the maze. The rats were given one trial per day until 10 consecutive trials without error had been run." During the first one-fifth of the learning trials, the mean number of first-choice errors fell from a maximum at the first to a minimum at the last choice point. During the last two-fifths of the trials, however, the minimum was at the third choice point with a slightly larger number of errors at the last choice point. Both results are consistent with Hull's theoretical predictions. An equation is derived relating the number of errors to reaction potential; the function is logarithmic in form.—*D. W. Taylor.*

THINKING AND IMAGINATION

3470. Armstrong, Edward A. *Shakespeare's imagination.* London: Lindsay Drummond Ltd., 1946. Pp. 191. 10s. 6d.—One method of seeking an understanding of creative imagination is to study in detail the works of a great poet or artist; and to study in particular the imaginative detail which goes to construct these works. Armstrong examines the bird and insect imagery of the Shakespeare, and the 'clusters' of images and ideas characteristically centered about particular birds and animals. These 'image clusters' originated in Shakespeare's mind partly from memories of past experiences, but still more by the emotionally charged reconstruction of the material at subconscious levels. Truly imaginative construction differs from phantasy which, though proceeding from the same levels, is dominated by wish fulfillment; it is detached from the particular emotional and personal experiences of the poet. Thus in the Freudian theory, based so largely on pathological material, the crude instinctive contents of the unconscious mind undergo a moral censorship at the pre-conscious level, before they can enter the conscious mind. But in creative activity the selective action of the preconscious levels upon the products and psychic energy of the unconscious mind is enormously facilitated by conscious voluntary intellectual activity.—*M. D. Vernon.*

3471. Bowers, Henry. (Normal School, Stratford, Ont.) *Thinking for yourself.* Toronto: J. M. Dent & Son, 1946. Pp. xi + 310. \$2.75.—It is proposed that a required course entitled "Elements of Reasoning" be included in the secondary school curriculum, taught by persons specially trained in psychology and logic. This book illustrates the materials of instruction for such a course with its principles drawn from logic and the psychological aspects of thinking, with a section on suggestibility and recognizing propaganda, and its illustrations of clear and faulty reasoning drawn from advertising, algebra, geometry, social studies, English, science, intelligence testing procedures, and everyday life.—*W. L. Wilkins.*

3472. Johnson, Robert E. (Coll. William and Mary, Williamsburg, Va.) *Suggestion and visual*

impression. *J. Psychol.*, 1947, 23, 193-196.—Suggestion is studied in relation to the control of visual impressions. Visual impressions like dreams, may express themselves in terms of symbols. There is an advantage in working with visual symbols inasmuch as the subject is fully conscious while he deals with the material which is not the case in dreams or hypnotic states. The manner in which suggestions effect and control visual impressions was investigated through a series of experiments. The experiments indicate the creative faculty of the sub-conscious which will be reported in detail later.—*M. Mercer.*

INTELLIGENCE

3473. Gotor, Pablo, & Cascajo, Juan. *Inteligencia y época del año de la concepción.* (Intelligence and the season of the year of conception.) *Psicotecnia*, 1945, 5, 1-10.—With 2505 children, divided approximately equally between "poor" and "rich," no significant differences in intellectual ratings between the two classes were obtained. The highest incidence of the conception of "rich" children is in winter, while for the "poor" it is the summer. In other studies which have shown a relationship between intelligence and time of conception, the author believes that the relationship is between intelligence and factors in the economic and intellectual standing of the parents, rather than between intelligence and seasonal factors.—*C. G. Browne.*

3474. Zimmerman, Frederic T., Burgemeister, Bessie B., & Putnam, Tracy J. (Coll. Physicians & Surgeons, New York.) *A group study of the effect of glutamic acid upon mental functioning in children and adolescents.* *Psychosom. Med.*, 1947, 9, 175-183.—Neurological and psychological criteria were used in selecting 69 patients as experimental subjects of whom 28 were children and adolescents, and 44 mentally retarded, with a control group of 37 mentally retarded or convulsive patients who were given psychometric tests over a period up to 8 years prior to glutamic acid therapy. Administration of glutamic acid on a controlled basis resulted in (1) accelerated mental functioning indicated on verbal, motor, and Rorschach tests but more so on tests involving abstract thought than on those involving motor skill; (2) a greater degree of emotional stability. The most striking changes in mental functioning were shown in the seriously retarded group with statistically significant differences obtained between test and re-test IQ's. Clinical observations generally supported the quantitative findings. 15 references.—*P. S. de Q. Cabot.*

PERSONALITY

3475. Bluett, Charles G., & Beales, Ben B. (Bur. Vocational Rehabil., State Dept. Educ., San Francisco, Calif.) *An exemplification of various neuroses and comparable Humm-Wadsworth Temperament Scale profiles with typical case briefs.* *J. Psychol.*, 1947, 23, 133-149.—The authors find the Humm-Wadsworth Temperament Scale a means

of roughly differentiating and classifying various syndromes of temperament. Such analysis makes possible counseling around disability, and accelerates discovery of need for psychotherapy or psychotic referral. Evaluating profiles and case briefs are presented for vocational rehabilitation clients classified by the Humm-Wadsworth Scale as neurasthenic, conversion hysteric, anxiety neurotic, compulsive neurotic, manic-depressive, schizophrenic, and paranoid.—*M. Mercer.*

3476. Brüel, Oluf. *Graphologische Diagnostik.* (Graphological diagnostics.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1945, No. 6, 56-65.—The development of graphology as a diagnostic tool is briefly reviewed. 29 references.—*R. B. Ammons.*

3477. Burt, Cyril. *Symposium on personality. V.—Reply to criticisms and conclusion.* *Brit. J. educ. Psychol.*, 1947, 17, 6-19.—The discussions of this symposium (see 20: 1561, 2791, 4652, 21: 1533) point up the cleavage between the exponents of the theoretical standpoint and the clinical approach. On the constitution of personality the views of the academic psychologists are in essential agreement, with but minor differences in emphasis. The medical point of view holds that, since the problem child is essentially a clinical case, his personality can be judged only subjectively—not by the logic of science but by intuitive insight. And this is the concern of the medically qualified psychiatrist, not the psychologist, whose main function is testing. Burt, on the contrary, holds that psychology studies the whole mind by every possible approach. Since most problem children are normal, not mentally ill in the true sense of the term, their proper treatment requires the services of a practitioner trained in "normal psychology" primarily. Their need is environmental change, character training, or remedial teaching. Child guidance is, therefore, a psychological and educational problem rather than a medical one.—*R. C. Strassburger.*

3478. Harrower-Erickson, M. R. *Modification of the Rorschach method for large scale investigations.* *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 340-344.—While war time modifications of testing and therapeutic techniques result in some loss of the original value of the procedure, it is also true that new and unexpectedly useful data may thereby be uncovered. This is true of the various modifications of the Rorschach technique, which are reviewed in this paper. The loss of sensitivity for the study of individual cases may be offset by the fact that, for the first time, statistically reliable results may be obtained in a number of fields. 16 references.—*C. E. Henry.*

3479. Menninger-Lerchenthal, E. *Der eigene Doppelgänger.* (The illusion of the double self.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1946, No. 11, Pp. 96.—The illusion of a separated second self is discussed as related to several "problems": (1) premonitions of death, (2) "soul," (3) animistic explanations of the phenomenon, (4) art and literature, and

(5) neuropsychiatry and parapsychology. 81-item bibliography.—R. B. Ammons.

3480. Munroe, Ruth L. (Sarah Lawrence Coll., Bronxville, N. Y.) Rorschach findings on college students showing different constellations of sub-scores on the A.C.E. *J. consult. Psychol.*, 1946, 10, 301-316.—Two groups of female college students were selected: those having higher "L" scores on the American Council on Education Psychological Examination and those having higher "Q" scores. The Rorschach performance (group administration) of these two groups was compared. Higher "L" girls have a more "subjective" orientation; higher "Q" students are more apt to give a rather literal construction of objective reality.—S. G. Dulsky.

3481. Pulver, Max. Grundsätzliche Bemerkungen zur Ausdruckspsychologie. (Basic observations on "expression psychology.") *Beih. Schweiz. Z. Psychol. Anwend.*, 1945, No. 6, 5-28.—Insights in psychology are won through phenomenological investigation of the many-faceted complex related to consciousness. "Intentional psychology" interests itself in the process of sensory elaboration of the situation. The intentions of the individual are best observable through his expressive movements, the province of "expression psychology." "Real" intentions are observable through various minimal cues, especially certain aspects of handwriting. Graphology attempts to grasp the motives behind, as well as the genuineness of, behavior. The best source of material for delving into the inner personality is the tiny, unnoticed, automatic movement components in handwriting.—R. B. Ammons.

3482. Randall, Guy C., Ewalt, Jack R., & Blair, Harry. Psychiatric reaction to amputation. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 94-115.—"The reaction to the loss of one or more limbs has been studied in 100 soldiers who are considered normal. 76 of these men were injured in battle and 24 in accidents. Lower limb amputations predominate. The average age of these patients is 26.7 years. They are all well trained and experienced soldiers. In general upper extremity injuries, married men, and older men have less trouble in social adjustment to amputation. More than 50% plan some change in occupation as a result of the injury. The planned changes are more common in younger groups and in groups with lower extremity loss. There is considerable difficulty in sexual adjustment. This phase of the problem is to be investigated further. Signs of psychopathology in terms of personality change, anxiety, emotional instability, aggressive acts, and alcoholism occur in a surprising percentage of these men. Phantom sensations of some type occur in 95%. An increased religious feeling is common in both groups but more frequent in the battle casualties (38%) than in non-battle casualties (20%)."—C. E. Henry.

3483. Ruesch, Jurgen, Christiansen, Carole, Patterson, Lloyd C., Dewees, Sally, Jacobson, Annemarie, & Soley, Mayo H. (U. California Med. Sch.,

San Francisco.) Psychological invalidism in thyroidectomized patients. *Psychosom. Med.*, 1947, 9, 77-91.—A socio-psychological study of a representative sample of 35 male and female patients subjected to sub-total thyroidectomies and whose clinical diagnoses were verified by pathological reports on specimens removed at operation. 5 psychiatric interviews were given along with the short form of the Wechsler-Bellevue Test and an abbreviated form of the Minnesota Multiphasic Personality Inventory. General characteristics of this group, whose mean age was 41, were: (1) an unusually high rate of married people, (2) an intelligence level above average, (3) low grade interests and conventional recreational activities, (4) frequent changes in religion, (5) a high divorce or separation rate, (6) early marriages, (7) a high frequency of hospitalizations and operations, (8) an above average incidence of parents of foreign parentage. 65% of the cases had nervous and psychiatric symptoms. Thyroid patients appear to be drawn from the lower middle class while social climbers and strainers predominate. They come from relatively large families and do not have the social techniques to make social and cultural adjustments. Two thirds of the patients in this study who had normal childhood patterns recovered without complications. A summary of socio-psychological aspects of patients with thyroidectomy (toxic and non-toxic goiter) found by other investigators is given. 26 references.—P. S. de Q. Cabot.

3484. Shannon, J. R. (Indiana State Teachers Coll., Terre Haute.) Traits of research workers. *J. educ. Res.*, 1947, 40, 513-521.—On the assumption that the traits found among eminent research workers are the ones which are conducive to success in research, biographical material concerning 250 research workers, ranging from Euclid and Pythagoras to L. M. Terman and E. L. Thorndike, was analyzed. A master list of 46 trait names was prepared. The biographical material was then analyzed and for each of the research workers note was made if the author said the worker possessed that trait, and if the possession of the trait was verified. Among the traits most frequently found were enthusiasm, creativeness, aggressiveness. Among the least frequent were: religiousness, self-control, health, and the one negative trait in the list—anti-sociality.—M. Murphy.

3485. Teltscher, Herry O. Handwriting; the key to successful living. (2nd rev. ed.) New York: Putnam, 1946. Pp. xiii + 301. \$3.00.—"Your handwriting is the record of your personality, a mirror in which are reflected your character traits and abilities, your thoughts and emotions, conscious and subconscious, your intentions, talents and ambitions." The method is fully described and illustrated for the layman to undertake his own psychoanalysis and psychotherapy. "Slant your writing one way only, right or left, depending upon whether you want to develop extraverted or introverted tendencies. . . . As a result, your problems will vanish. . . . You will be free, released, and life

will be full of hope and meaning for you." No tangible validation is given for the method advocated or for the conclusions drawn. 28 references. (See also 16: 3656.)—*L. R. Steiner.*

3486. Uribe Cualla, Guillermo. *Simón Bolívar y su personalidad genial.* (Simon Bolivar and his genius-personality.) *Rev. Med. legal Colombia*, 1946, 8, 11-25.—Retrospective study of the personality of the Liberator Simon Bolivar is of necessity very difficult and for that matter hypothetical, when based solely on biographical data and familiar portraits and when all the elements of a somatic and psychic order which are to be obtained only through direct study of the actual person are in this case unknown. It is impossible to maintain his hyperthyroidism even in a mild form because many of the corresponding somatic data are lacking. It is likewise impossible to classify the Liberator within a nosological category of psychiatry as subacute manic or hypomanic because that would be to consider him as mentally ill—a thing contradictory to fact. Instead of being psychopathic or psychopathological, Bolivar was a true American genius by reason of the maximal conditions of genius: intelligence, preparation, loftiness of mind, physical resistance, military talents, sacrifice, patriotism and generosity. Geniuses such as Bolivar are products of human selection, in whom are harmoniously united optimal biological conditions directed by an intellect of first magnitude.—*F. C. Sumner.*

3487. Wells, F. L. (*Harvard U., Cambridge, Mass.*) Verbal facility, sensitive affect, psychometrics: two "palimpsest personalities." *J. Psychol.*, 1947, 23, 179-191.—Every personality is to some extent a palimpsest of nurture upon nature. Two cases are presented in which there was probability that the patterns of nurture were relatively opposed to those of nature, and in consequence, personality integration was not fully achieved. Each case had a fair degree of constitutional mesomorphy, and each case had an upbringing calculated to mask the somatotonía that would be a natural correlate of this body type. Each of these men met the somatotonic demands of war service in a better way than the previous personality organization would have predicted and more in accord with a hitherto masked somatotonía. More specific inquiry concerns the role of language habits in these personalities. In spite of a high initial selection for similarity in this respect these personalities differed widely in other respects and consequently the meaning of the similar trait assignments must be differently understood. The main teaching of these cases is that the clinically invidious designation of verbalist is an example of an easily observed pattern imposing its name on a condition where it happens to be a frequent symptom. Dependence upon language and freedom in its use is compatible with various personality organizations of more than ordinary mental health.—*M. Mercer.*

3488. Wiener, Daniel N. (*V.A., Minneapolis, Minn.*) Differences between the individual and

group forms of the Minnesota Multiphasic Personality Inventory. *J. consult. Psychol.*, 1947, 11, 104-106.—200 veterans applying for guidance were given the Minnesota Multiphasic Personality Inventory—100 took the individual form, 100 the group form. The two groups were equivalent in age and education. No differences approaching statistical significance were noted between the two forms on any of the scales excluding "Cannot Say" which was not studied.—*S. G. Dulsky.*

[See also abstracts 3346, 3363, 3364, 3453, 3508, 3527, 3590, 3655, 3663, 3767.]

DEVELOPMENTAL PSYCHOLOGY

CHILDHOOD AND ADOLESCENCE

3489. Alexandra, Sister M. Personality adjustment and leadership. *Educ.*, 1946, 66, 584-590.—Data on leadership were obtained in an investigation of 500 girls ranging in age from 11-8 to 15-10, who were members of Girl Scout troops. Leaders were designated as those holding 3 offices of leadership to which they had been elected, 1 in the Scouts and 2 in school or church organizations. The returns revealed 112 "elected leaders" and 388 non-leaders. Scores on the California Test of Personality showed statistically significant differences in favor of the leaders for total score, and the subscores for both self-adjustment and social adjustment.—(Courtesy of *Child Developm. Abstr.*)

3490. Baxter, Beatrice Nancy. Vagaries of junior high schoolers. *Calif. J. second. Educ.*, 1946, 21, 181-184.—Adjustment problems, which loom large to the adolescent as he is making the transition from childhood to adulthood, are presented for the adults responsible for teaching and guiding the junior high school student.—(Courtesy of *Child Developm. Abstr.*)

3491. Becker, Howard. *German youth; bond or free.* London: Kegan Paul, Trench, Trubner and Co., Ltd., 1946. Pp. xiii + 286. 18s.—This book consists of a description of life in Germany before and after the rise of industrialism; the rise of the *Wandervogel*; the confused movements which followed the 1914-1918 war and their eclipse by the Hitler Youth; and finally the debacle during and after the 1939 war, with a brief reference to the Edelweiss movement. Somewhat dramatized versions are given of opinions voiced by individual Germans to the author as to the course of events in the 1920's and since 1945. The book is illustrated by drawings taken from *Wandervogel* and Hitler Youth propaganda.—*M. D. Vernon.*

3492. Borg, Lloyd E. (*The Minneapolis Tribune, Minneapolis, Minn.*) Public opinion among minors. *Int. J. Opin. Attitude Res.*, 1947, 1, 110-111.—This paper cites results of a poll administered by interview to a representative sample of Minnesota youth between 12 and 20 years of age. Teen-agers agree closely with adults on most questions but tend to be less critical.—*N. L. Gage.*

3493. Gardner, L. Pearl (U. S. Public Health Service Dispensary, 4th and D Streets, S.W., Washington 25, D.C.) An analysis of children's attitudes toward fathers. *J. genet. Psychol.*, 1947, 70, 3-28.—A questionnaire of 45 items concerning attitudes and activities of fathers was given to 388 children of the fifth and sixth grades. There were approximately equal numbers of boys and girls, and fifth and sixth graders. "Both sexes criticized similar things in the father, but boys were slightly more critical than girls. Children did not express special affection for the parent of opposite sex and agreed in giving the mother double the preference of the father. Both sexes desired no more affection from either parent. Each sex gave more ways in which they would like to resemble the parent of the same sex but rated the parent of opposite sex somewhat higher in disposition and character. Both sexes preferred the mother to the father for services, and extreme preferences was for the parent of like-sex. . . . Girls did more chores for both parents than boys."—R. B. Ammons.

3494. Graber, Gustav Hans. Einheit und Zwiespalt des Seele; Entwicklung, Struktur und Ambivalenz des Seelenlebens beim Kinde. (Unity and division of the mind: development, structure and ambivalence in the mind of the child.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1945, No. 8. Pp. 123.—Unity, division, polarity, and ambivalence are considered as basic concepts. The prenatal state is considered as unified, but division comes with birth. Division is based on disturbance of unity by birth, development of the drives, cathexes, ego development, sex differences, and intra-cultural conflicts of morals. Mental development of the individual tends back toward unity. 146-item bibliography.—R. B. Ammons.

3495. Graves, Winifred Sibley. (Purdue U., Lafayette, Ind.) Factors associated with children's taking music lessons, including some parent-child relationships: I. History and procedures. *J. genet. Psychol.*, 1947, 70, 65-89.—Forty-four children judged to excel in music were compared with a matched group of 44 considered least accomplished. Data collected included intelligence test score, rating on the Smalgreid Social Acceptance Scale, list of play activities, various music tests, evaluation of emotional conflicts, survey of attitudes toward music, and results of a group Rorschach. A summary is given of previous work and of the design and conduct of the present investigation. Actual results are presented in a second article (see 21: 3496.)—R. B. Ammons.

3496. Graves, Winifred Sibley. (Purdue U., Lafayette, Ind.) Factors associated with children's taking music lessons, including some parent-child relationships: II. Results and conclusions. *J. genet. Psychol.*, 1947, 70, 91-125.—Results from an experiment outlined in a previous article (see 21: 3495), indicated that the experimental group was superior with respect to pitch, rhythm, tonal memory, attitude toward music, and acceptance by other children. Personality tests showed the controls to

be more disturbed emotionally. A much larger percentage of parents of the experimental group had had music lessons. Analysis is made of differences between children rated high and low in the experimental and control groups. 29 references.—R. B. Ammons.

3497. Harris, Dale B., & Harris, Elizabeth S. (U. Minnesota, Minneapolis.) A study of fetal movements in relation to mother's activity. *Hum. Biol.*, 1946, 18, 221-237.—Time sampling observations of fetal activity were made twice daily for 30 minutes prior to rising and after retiring. All records were made by the mother and her feeling of well-being or fatigue estimated on a 4 point scale. The observations were continued for 129 days, terminating 36 hours prior to the infant's birth. Results indicate that reliable observations by the mother can be made without special equipment; fetal movements increase "in strength and number most rapidly during the first month of perceived motility"; the fetus was more active at the close of the day than in the morning; the mother's fatigue "cannot be said with assurance" to be associated with fetal activity. These and other results are considered in relation to early studies.—L. A. Pennington.

3498. Harris, Robert E., & Thompson, Clare Wright. (U. California Med. Sch., San Francisco.) The relation of emotional adjustment to intellectual function—a note. *Psychol. Bull.*, 1947, 44, 283-287.—The writers discuss the relationship between children's emotional adjustment and tested intelligence with particular reference to the Despert and Pierce study (21: 928).—S. Ross.

3499. Hart de Ruyter, Th. Massenpsychologische und psychopathologische Erscheinungen beim Kinde und Jugendlichen während des Krieges und der Nachkriegszeit. (Psychological and psychopathological phenomena of children and adolescents in crowds during the war and the post-war period.) *Z. Kinderpsychiat.*, 1947, 13, 205-220.—Spontaneous group formations are rare before the age of eight. In the pre-pubertal stage, human beings are often transformed into "collective beings." At this age, pathological gregarious instincts may lead to the formation of gangs, but individual resistance can prevent a child's dissolution in the mentality of the crowd. Pathological group reactions and infections among mentally and socially unstable children were observed. Between 1938 and 1942, incidence of enuresis and juvenile delinquency was tripled. Many adolescent boys occupied themselves with black markets; many girls became prostitutes; two thirds of the school children were truant. The deterioration of authority and the uprooting of families were the outstanding factors particularly among unstable families. Among the observed syndromes, a "pseudopsychopathy of uprooting" and a "psychosis of uprooting" have been distinguished by Steenbergen-v.d. Noordaa. Also psychoneurotic symptoms with guilt feelings and self-punitive desires have been observed in connection with conflicts of adaptation to a new environment in

the absence of parents. A few illustrative cases are described. French summary. 19 references.—R. Lassner.

3500. Hewitt, Jack E. (U. California, Berkeley.) Fear of the water. *J. Hlth phys. Educ.*, 1947, 18, 302-304, 344-349.—Many fears of water are traceable to unfortunate accidents in childhood, particularly in infancy. Practical suggestions are made for avoiding situations provoking fear of water in connection with infants and older children.—F. C. Sumner.

3501. Jones, Harold E. (U. California, Berkeley.) The sexual maturing of girls as related to growth in strength. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1947, 18, 135-143.—The present study reveals that post-menarcheal girls are stronger in terms of dynamometer tests of right and left hand grips than pre-menarcheal girls of the same age, that strength appears to be more closely related to physiological age (age deviation from the menarche) than to chronological age, that prepubertal growth spurts in strength begin about 1 year before the menarche and reach a peak about the time of menarche.—F. C. Sumner.

3502. Joseph, Daniel B., & Dodes, Irving Allen. The pupils and parents of a comprehensive high school of New York City. *High Points*, 1946, 28, 15-25.—Data on the understanding between the pupil and his parents were obtained by questionnaires answered anonymously by the boys enrolled in a vocational high school, and by their parents. Over 1000 questionnaires were distributed with 100% return from the boys and 60% from parents. The percentage distribution of various answers to the questions are briefly summarized to show the pupil's adjustment to school, his attitudes toward school, his life goal, and his psychology, as well as sources of his out-of-school learning. Parents' understanding and opinion of their sons' schooling were also recorded, as well as the apparent influence of the parents' education, occupation, and reading interests.—(Courtesy of *Child Developm. Abstr.*)

3503. Kraft, Walter A. (U. California, Berkeley.) Die Haltung amerikanischer Kinder zum Kriege. (The attitude of American children towards the war.) *Gesundh. u. Wohlf.*, 1945, 25, 172-176.—Apart from war-games American children do not occupy themselves very intensively with the war and its problems. The drafting of brothers, relatives, or even the father is sensed by them but somewhat more unconsciously than in the adults. Their life-rhythm is changed only in those families in which the father is in the army and is in real danger or in which the mother formerly at home has accepted war work and can no longer be with the children. Children under 6 manifest fear and anxiety that their mother or both parents might leave them; the half-grown evidence uncertainty and insecurity as to their future. War is rejected as "bad" by almost all, although killing of the enemy is held justified in self-defense. Children between ages 7 and 13 did not understand the significance of the struggle of

democracy and freedom against dictatorship and enslavement. Hitler, the Japanese, and the Germans were blamed in that order for the war.—F. C. Sumner.

3504. Kundert, Elizabeth. (Mental Hygiene Clinic, State Dept. Public Welfare, Montpelier, Vt.) Fear of desertion by mother. *Amer. J. Orthopsychiat.*, 1947, 17, 326-336.—Cases are presented to illustrate the frequency and importance of fear of desertion by the mother in child guidance clinic patients. The author uses a verbal assurance method of treating such children, cautioning the mother to use a simple vocabulary and short phrases when assuring a child of his security.—R. E. Perl.

3505. Leopold, Werner F. (Northwestern U., Evanston, Ill.) Speech development of a bilingual child; a linguist's record. Vol. II. Sound-learning in the first two years. *Northw. Univ. Stud. Humanities*, 1947, No. 11. Pp. xii + 295. \$5.50.—"The materials of Hildegard's speech of the first two years which were represented in the first volume from the point of view of the vocabulary are used again in this volume for the purpose of examining the learning of sounds in detail and of finding relationships between the sounds of standard languages and the sounds of the child." Treated in this monograph are the standard sounds in the child's speech, the child's representation of standard sounds, the child's sounds and their standard prototypes, the child's substitution sounds, and the child's sound system. General phonetic problems are discussed. Some discussion and theory of the sound development process in the child is offered. (See 14: 2161.)—D. T. Herman.

3506. Lewis, W. Drayton. (Southwestern Louisiana Institute, Lafayette, La.) Some characteristics of children designated as mentally retarded, as problems, and as geniuses by teachers. *J. genet. Psychol.*, 1947, 70, 29-51.—Information was collected from over 45,000 children in grades 4 to 8, in a large number of communities. Results were available for each child for the Kuhlmann-Anderson Test, the BPC Personal Inventory, and an achievement test. Ratings were also made of family background, personality traits, and activities. In addition, teachers, without knowledge of the results of the objective testing, were asked to rate each child as extremely retarded or genius and to indicate if he were a distinct problem. Teacher's estimates of intellectual ability were inaccurate to a marked degree, with "retarded" children averaging over 90 IQ. "Problem" children were those who upset classroom routine, were aggressive and disturbing. The genius group was apparently selected because of adjustment to classroom, intellectual and academic interests, and achievement.—R. B. Ammons.

3507. National Council of Social Service. (26 Bedford Sq., London, W.C. 1.) Children without homes. London: The National Council of Social Service, 1945. Pp. 40. 2s.—The report of a conference called by the Women's Group on Public Welfare provides a shortened account of the main

speeches. The points raised in the discussion included the administrative framework; the place of adoption in the care of the homeless child; foster care; types of residential care; vocational guidance; after care; and staffing. 43-item reading list.—*R. D. Weits.*

3508. Oaks, Ruth E. The child: his painting and his personality. *Childh. Educ.*, 1946, 24, 426-429.—Sequences in children's painting, also termed stages of development in painting, are discussed. Revisions in the method of instructing children in painting are suggested.—(Courtesy of *Child Developm. Abstr.*)

3509. Odum, Doris M. (Royal Victoria and West Hants Hosp., Bournemouth, England.) Some observations on the reaction of children to wartime conditions as seen in a child guidance clinic. *Z. Kinderpsychiat.*, 1947, 13, 173-180.—While the emotional reactions of children in general to air raids were conspicuously few (except for certain sensitive children), the evacuation brought about greater tensions. In consideration of severe emotional disturbance in children under the age of 5 when separated from the mother, this was avoided whenever possible. The foremost problems to be dealt with were: enuresis, emotional disturbances, and behavior deviations. Enuresis in the majority of cases is ascribed either to lack of training or to some physiological defect. There were many more boys than girls in this category. In evacuated children, there was an increase in delinquency, also more marked in boys than in girls. A number of cases showed anxiety symptoms, not so much caused by worry about possible injury to parents as by the fear of being deprived of their care. Among the large number of children referred for stammering and other speech defects, the incidence was about 6 boys to 1 girl; in some cases stammering had resulted from an air raid experience. Some of the problems of re-adaptation, since the end of the war, of the child to his home and parents are discussed. German resume.—*R. Lassner.*

3510. Peller, Lili E. Nursery school readiness. *Child. Educ.*, 1946, 23, 28-33.—The author discusses 3 main factors to be considered in determining a child's readiness for group experiences: his age and general maturity, his ability to form attachments for others, and his opportunities for developing a desire to go to nursery school. Techniques for aiding adjustment at nursery school are described with case illustrations.—(Courtesy of *Child Developm. Abstr.*)

3511. Thompson, George G., (Syracuse U., Syracuse, N. Y.) & Horrocks, John E. (Ohio State U., Columbus.) A study of the friendship fluctuations of urban boys and girls. *J. genet. Psychol.*, 1947, 70, 53-63.—"The purpose of this study was to investigate the degree of friendship fluctuation among adolescent boys and girls living in urban areas, and to compare the degree of friendship fluctuation of urban youth with that of rural youth as determined in a previous study. Nine hundred and sixty-nine

urban youth consisting of 436 boys and 533 girls participated in this study. The subjects were asked to list their three best friends on two occasions, 14 days apart. . . . In this urban youth population, there is a trend toward greater stability in friendship with increasing chronological age. These data do not show any upswing in friendship fluctuation at, and following, the initial phases of adolescence. . . . The urban adolescents of this investigation demonstrate a slightly greater stability in their friendships than the rural adolescents studied in a previous experiment."—*R. B. Ammons.*

3512. Tramer, M. (U. Bern, Switzerland.) Das Kind in der Masse. (The child in the crowd.) *Z. Kinderpsychiat.*, 1947, 13, 221-232.—The study of the child in a crowd of adults has hitherto been neglected. An investigation carried out by the author and F. Baumgarten on about 250 Polish refugee (non-Jewish) children, who were hospitalized in Switzerland as tubercular possibilities, gave the opportunities to study their psychological mechanisms. Regression, which is so important in adult crowd psychology, is not equally so in the child by virtue of his age. Projection of the ego and identification with the leader, operate in children and adolescents in a different manner and present a particular psychic structure. Crowds composed only of adolescents and children, manifesting striking phenomena which interfere with the educational system, have appeared so frequently during these times of unrest, that they are becoming a menace to the community. From the standpoint of mental hygiene, a thorough study of the influence of crowds on the child is imperative. In terms of resulting findings, leaders will have to take children's presence in crowds into account. Adults have been responsible for morbid crowd formations of children and adolescents after World War II, a consequence of their failure to construct and to maintain a sound civilization. Suggestions for therapy are outlined. French summary.—*R. Lassner.*

3513. Violet-Conil, Madeleine, & Canivet, Nella. L'exploration expérimentale de la mentalité infantile. (The experimental investigation of infantile mentality.) Paris: Presses Universitaires de France, 1946. Pp. 441.—The use of a medico-psychological technique in the study of the development of personality is considered in a series of pairs of chapters devoted to the theoretical and technical aspects of these topics: morphology, sense modalities, motor skill, intelligence, aptitude, personality, and *enquête*. Illustrative case histories are appended. The practical individual and group applications of the methodology as well as its philosophical implications are discussed. 64 references.—*A. J. Sprow.*

3514. Wadsworth, Morton L. (Child Guidance Bureau, Bd. Education, New York.) Adolescent turmoil. *Understanding the Child*, 1947, 16, 86-89.—The case of Helen, a 13 year old seriously withdrawn and confused freshman, is presented to describe how 2 teachers in a large New York City high school succeeded in helping her to broaden her

interests, make friends and build up self-confidence, by guiding her school experiences in indirect ways.—*J. L. Gewirts.*

MATURITY AND OLD AGE

3515. Krapf, E. Eduardo. *Sobre el carácter senil.* (On the character of senility.) *Rev. Univ. B. Aires*, 1945, 3, 103-118.—"The present work is a first attempt . . . to establish a psychological structure of "normal" senility to obtain a solid fundamental knowledge of the future pathological mentality of the old person, of a comparable dignity with that which exists for the child, and which needs yet be elaborated for the adolescent, climacteric and pre-senile stages." The author is concerned with the "character" rather than the "personality" of the aged. Extended discussion of memory, affective disorders, and sexuality in old people. The number of aged is increasing: there were 6 times as many children below five in 1850 in the United States as people above 65, now both groups are equal in numbers. There was never such a need for the mental hygiene of the aged in view of the increasing amount of affective disorders in this group.—*R. J. Corsini.*

[See also abstracts 3474, 3548, 3565, 3632, 3663, 3664, 3667, 3668, 3670, 3761.]

BEHAVIOR DEVIATIONS

(incl. Abnormal Psychology)

3516. [Anon.] *Changes in methods of suicide.* *Statist. Bull. Metrop. Life Insur.*, 1947, 28, No. 5, 9-10.—Statistics of suicides among industrial policy holders between 1921 and 1946 show that firearms, hanging, asphyxiation (gas), and poison account for over 75% of all suicides, and during the quarter century have maintained the top 4 positions. Within these positions, however, poisoning has decreased for both men and women, while hanging has increased. Men use firearms over twice as frequently as women, while women resort to poison in a similar ratio.—*C. M. Louttit.*

3517. Anson, Barry J. (Northwestern U. Med. Sch., Chicago, Ill.) *Saints, animals, the stars and demons in medieval medicine.* *Quart. Bull. Northwest. Univ. med. Sch.*, 1947, 21, 1-17.—The role which spirits, saints, demons, stars, and animals played in medieval medicine in respect to the etiology and therapy of mental and physical illness is reviewed.—*F. C. Sumner.*

3518. Baird, John H. *Neuropsychiatric problems of the Veterans Administration.* *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 285-291.—While good progress is being made in securing adequate bed space and physical equipment, there is in nearly all fields a severe shortage of adequately trained personnel.—*C. E. Henry.*

3519. Blumer, Samuel. *Selbstmord und Witterung.* (Suicide and weather.) *Gesundh. u. Wohlf.*, 1945, 25, 89-111.—1532 suicides in Zurich

and its environs from 1923 to 1942 were studied in relation to the weather. A meteorological influence upon the committing of suicide was held to exist when there was a high frequency of suicides on certain days on which the weather was of a character differing markedly from that on days of low suicide frequency. The study established that the suicides showed a weather-dependence in that 54% of cases occurred with south wind conditions and 32% of cases with passage of cold or warm fronts. In 70% of all the suicides a weather disturbance was established. The least suicides occurred in periods with stable, high pressure weather. The highest frequencies of suicide were found in spring and summer with the lowest in autumn. 27 references.—*F. C. Sumner.*

3520. Brenman, Margaret. [Chmn.], et al. *Problems in clinical research; round table, 1946.* *Amer. J. Orthopsychiat.*, 1947, 17, 196-230.—At this round table 4 main papers were presented followed by discussion from the floor. L. S. Kubie emphasized the limitations of the use of experimental method in psychiatry which in turn necessitates dependence upon clinical research. A larger number of observations must be used and a method of total recording must be developed so that details of many simultaneous variables can be studied with microscopic care. H. A. Murray wants the psychiatrist first to survey our American scene, examine the subculture to which adjustment is expected, analyze the family constellation, explore the total personality of the patient, and finally come down to the symptom. Ernst Kris emphasizes the clarification, verification, and amplification of hypotheses, the psychiatric interview still being the most important source of our knowledge. M. Gill and M. Brenman explained the lag in basic research, emphasized the bad results attributable to this lag, discussed statistical studies and intensive studies of single cases, and show that clinical research may lead to as valid results as experimentation.—*R. E. Perl.*

3521. Brill, Norman Q. (Georgetown U., Washington, D. C.) *The role of vitamin deficiencies in neuropsychiatric diseases.* *Amer. Practit.*, 1947, 1, 353-356.—Neuropsychiatric diseases found associated with vitamin deficiencies are reviewed. Vitamin A deficiency appears unimportant save in early growth retardation. Vitamin B₂ deficiency experimentally induced has been found associated with various emotional disturbances such as anxiety, fear, irritability, hypersensitivity to pain and noise, headache, insomnia, paresthesias, neurasthenia-like symptoms, while nicotinic acid deficiency has been found associated with pellagra psychosis. Vitamin B deficiency appears definitely related with delirium tremens and Korsakoff's syndrome. Vitamin C and D deficiencies are not known to produce nervous system disorder. Likewise vitamin E deficiency appears to have no effect on the human nervous system but has been found in animals to produce a retardation of muscle development.—*F. C. Sumner.*

3522. Clemmensen, Carl. (*Bispebjerg Hosp., Denmark.*) The contribution of psychiatry to social life. *Acta psychiat., Kbh.*, 1946, 21, 211-215.—The contributions of Danish psychiatry to child welfare, criminal law, and education are briefly reviewed.—A. L. Benton.

3523. Collins, Ralph T. Neuropsychiatry in an overseas evacuation hospital. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 147-155.—This is a concise review of the techniques of reception and sorting, therapeutic procedures, and type of neuropsychiatric disorder encountered by an Army psychiatrist in the Mediterranean theater of operations. It is concluded that neuropsychiatry has already contributed much and will continue to do so.—C. E. Henry.

3524. Ebaugh, Franklin G., Solomon, Harry C., & Bamford, Thomas, E., Jr. [Eds.] Military neuropsychiatry. (*Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25.) Baltimore, Md.: Williams & Wilkins, 1946. Pp. xviii + 366. \$6.00.—The twenty-fifth volume in this series contains 33 papers as well as an Introduction and Forward. The 47 contributors cover a wide range of civilian and military authorities, including several from other countries. The papers range from EEG and EMG research reports to theoretical discussions of personality. There is a considerable emphasis upon combat fatigue and new therapeutic approaches such as group therapy and narcoanalysis. There is good agreement among the several contributors that a high proportion of NP casualties can be returned to duty with only brief therapy. 34 figures; 48 tables.—C. E. Henry.

3525. Frauchiger E. (*U. Bern, Switzerland.*) Seelische Erkrankungen bei Mensch und Tier; eine Grundlage für eine vergleichende Psychopathologie (Psychic diseases in man and animal; an introduction to a comparative psychopathology.) Bern: Huber, 1945. Pp. 282. Fr. 18.50.—The subtitle "A Basis For A Comparative Psychopathology," indicates the main aim of this book. It is written for the veterinarian, the psychiatrist, and the animal psychologist, by a comparative neurologist. The underlying philosophy is closely related to Ludwig Klages' biocentric Weltanschauung. The book is divided in three parts. Part One: aims, history, and different approaches. Part Two: general psychopathology. Part Three: special psychopathology. There is a bibliography at the end of each part.—C. Bondy.

3526. Gutiérrez-Noriega, Carlos. Cervantes y la psicología médica. (Cervantes and medical psychology.) *Rev. Neuro-Psiquiat., Lima*, 1946, 9, 107-119.—The author's position that Cervantes in his literary works recorded psychological and psychopathological observations so original and important as to warrant consideration of him as one of the principal forerunners of modern psychiatry is here defended against certain critics who would refuse to a literary man a place among scientists. However, the essential in science is the veracity of the observations, no matter whether these observations be

recorded in poetry or prose. Cervantes lived at a time when Spain was cradling psychiatry and in the originality as well as the variety of psychopathological phenomena which he describes, he surpassed Weyer who has been considered the founder of modern psychiatry. As to his contribution to characterology, Cervantes had really no precursors.—F. C. Sumner.

3527. Herman, Morris. (*Bellevue Hosp., New York.*) Aberrant sex behavior in humans. *Ann. N. Y. Acad. Sci.*, 1947, 47, 639-645.—The writer discusses the problem of the division of sexual behavior into the dichotomies of normal and abnormal. Aberrant sex behavior is defined as sex activity utilized by preference as an end-point in gratification, despite the opportunity and ready availability of heterosexual genital contact. The author divides aberrant sexual behavior into three types: (1) inhibition of sexual impulses, (2) augmentation of sexual impulses, and (3) deflections of sexual impulses. The types are discussed and examples given.—S. Ross.

3528. London, Louis S. Libido and delusion. (2nd ed.) Washington, D. C.: Mental Therapy Publications, 1946. Pp. xi + 259. \$3.50.—The purposes of this book are: "1. To show that neuroses and psychoses are interrelated. 2. To explain the mechanisms of the libido in the neuroses and psychoses. 3. To encourage the publication of analyses of schizophrenia, giving case history studies."—L. B. Heathers.

3529. Menninger, William C. The problem of the discharged neuropsychiatric patient. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 70-77.—While 75-85% of the men discharged from the Army with the diagnosis of psychoneurosis do not appear to have undue difficulty in settling down in a civilian environment, the size of the Army was such that there still will be a very considerable number of such men who do need neuropsychiatric assistance. Possible modes of action are discussed under the headings of self solution of problems, family assistance, and community assistance.—C. E. Henry.

3530. Rees, J. R. The development of psychiatry in the British Army. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 48-53.—This description of the development and role of psychiatry in the British Army reveals a troublesome shortage of trained psychiatric personnel and hospital space. Prophylactic psychiatry (screening and selection) was the major problem, being handled as a separate branch of the Army Medical Department. Regulations permit retention of psychiatric patients for 9 months of treatment; only 7.5% of all such patients discharged from the army had had to be sent on to civilian mental hospitals.—C. E. Henry.

3531. Reinartz, Eugen G. Research aspects at the AAF School of Aviation Medicine in nervous and mental diseases. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 54-62.—While the EEG was not found useful in the selection of good or poor flyers,

or to be related to the complaint of fainting, groups of 40 enuretics and 125 cases of airsickness showed 20% and 24% abnormal records respectively. High voltage slow waves in normals were consistently developed at a simulated altitude of 18,000 feet; 100% oxygen postponed these changes to 40,000 feet; addition of carbon dioxide probably raises the critical altitude several thousand feet. High atabrine levels were not associated with EEG or NP abnormalities. Sheldon's somatotype technique was not useful as a selection device. Hyoscine appears to be the best remedy to date for airsickness, reducing incidence about 50%. Numerous animal studies of high altitude effects disclosed chronic neurological lesions without clinical sequelae. With humans, most of the neurological effects are transitory, probably vascular in origin. Additional research projects, including NP selection of air-crew personnel, are in progress.—C. E. Henry.

3532. Sim, M. (Royal Victoria Hospital, Netley England.) Quantitative estimation in psychiatric diagnosis. *J. roy. Army med. Corps*, 1946, 87, 281-285.—A quantitative method of diagnosing psychiatric disorders is described by the author. Numbers up to and including 6 are used for expressing the degree of a patient's illness in various categories, e.g., depressive or schizophrenic. The author believes this quantification, admittedly speculative, gives a more accurate picture than the qualitative nomenclature now in use.—F. C. Sumner.

3533. Strecker, Edward A., & Appel, Kenneth E. Psychiatric contrasts in the two World Wars. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 38-47.—World Wars I and II are systematically contrasted in outline form under the following headings: Nature of the warfare; organization of neuropsychiatry; statistics, etiology; predisposition; symptomatology; psychopathology; treatment; prognosis; increase in NP conditions. 42-item bibliography.—C. E. Henry.

3534. Zwerling, Israel. (Columbia U., New York.) Psychological factors in susceptibility to motion sickness. *J. Psychol.*, 1947, 23, 219-239.—It is generally agreed that a group of symptoms consequent to motion in a variety of vehicles and amusement park devices constitute a common syndrome termed motion sickness. This study investigates: (a) the effect of the introduction of an anxiety producing stimulus during rotation upon susceptibility to motion sickness; (b) the relationship between neurotic tendency and susceptibility to motion sickness; and (c) the relationship between responses to individual test items of personality inventories and susceptibility to motion sickness. Results show that electric shock applied during rotation in a Spiegel chair resulted in a significantly greater incidence of motion sickness in an experimental group than in a control group. A statistically nonsignificant but consistent relationship between neurotic tendency as measured by the Minnesota Multiphasic Personality Inventory and susceptibility to motion sickness was demonstrated. Twelve items of a series of 273 questions derived

from standard personality inventories showed significant differences between susceptible and non-susceptible subjects. 40-item bibliography.—M. Mercer.

MENTAL DEFICIENCY

3535. Bredmose, Georg V. The care of the feeble-minded. *Acta psychiat., Kbh.*, 1946, 21, 131-139.—The care of mental defectives in Denmark is described and a plea for greater social control is made.—A. L. Benton.

3536. Doll, Edgar A. (The Training School, Vineland, N. J.) Feeble-mindedness vs. intellectual retardation. *J. educ. Res.*, 1947, 40, 569-573.—In the classification of children for special education serious confusion has resulted from the failure to distinguish between the clinically feeble-minded and the clinically normal but intellectually retarded. For the former special education can provide improvement in habits and adjustment; the latter can benefit from it sufficiently to take their places in society as dull normals. The differentiation between the 2 groups cannot be made by any single mental measurement. It requires a clinical consideration of motor proficiency, of the dynamic aspect of personality, of somatic attributes, of the mental pattern. The measurement of social competence is imperative since this is the crux of the distinction.—M. Murphy.

3537. Schachter, M. Deux observations cliniques d'idiotie avec amaurose; rapports pathogéniques avec l'idiotie amaurotique de Tay-Sachs. (Two clinical observations of idiocy with amaurosis; pathogenic relationships with the amaurotic idiocy of Tay-Sachs.) *Z. Kinderpsychiat.*, 1947, 13, 180-187.—The neuro- and ophthalmopathology in 2 cases of amaurotic family idiocy.—R. Lassner.

3538. Schachter, M. La prueba de Rorschach en un caso de miopatia infantil y oligofrenia. (The Rorschach test in a case of infantile myopathy and oligophrenia.) *Rev. Neuro-Psiquiat., Lima*, 1946, 9, 369-374.—Effort was made to determine by means of the Rorschach test whether character disturbances bear any relationship either with mental retardation or with muscular dystrophy in a 9 year old boy who is both myopathic and oligophrenic (MA 6). While the Rorschach revealed clearly in this case oligophrenia as well as abnormalities of character, the Rorschach responses of the patient showed a true and complete independence between his physical infirmity and his affectivity, particularly, no feeling of inferiority due to his muscular dystrophy.—F. C. Sumner.

3539. Teska, P. T. (Louisiana State U., Baton Rouge.) The mentality of hydrocephalics and a description of an interesting case. *J. Psychol.*, 1947, 23, 197-203.—Clinical psychologists may be called upon to predict the educability of hydrocephalics. It is therefore important that they be familiar with the general picture of the disease and the prospects for normal intelligence for the child. Literature on

hydrocephalus is generally written from the medical standpoint. This paper presents data pertinent to the problem of the psychologist and discusses one case fully. 23 references.—*M. Mercer.*

CLINICAL NEUROLOGY

3540. Antoni, Nils. (*Neurological Clinic, Karolinska Institutet, Stockholm.*) Dreamy states, epileptic aura, depersonalization and psychasthenic fits; a few comments and reflections. *Acta psychiat., Kbh.*, 1946, 21, 1-20.—Generalizing from an extensive clinical experience, the author discusses epileptic seizures and points out that the "aura," which is traditionally considered a mere precursor of the convulsion, is an integral part of the seizure. In respect to the "dreamy states" (Hughlings Jackson), it is pointed out that they suggest a temporal lobe lesion only when olfactory and gustatory aura are integral parts of the syndrome. The "dreamy state" alone is not specifically connected with the temporal lobe. The depersonalization states experienced by normal individuals and by psychoneurotics cannot be distinguished from the depersonalization states occurring in an epileptic setting.—*A. L. Benton.*

3541. Borberg, N. C., & Zahle, V. (*Rigshospitalet, Copenhagen.*) On the psychopathology of disseminated sclerosis. *Acta psychiat., Kbh.*, 1946, 21, 75-89.—The mental symptoms occurring in a group of 330 patients with multiple sclerosis are described and correlated with the physical symptomatology. 47% developed mental symptoms. The characteristic euphoria which is the most prominent mental symptom is specific for the disease and therefore of differential diagnostic significance. Special mental conditions occurring in certain cases are described. There is a correlation between certain physical signs (severe motor symptoms, sphincter disorders) and the occurrence of mental symptoms.—*A. L. Benton.*

3542. Buchthal, Fritz, & Clemmensen, Svend. (*U. Copenhagen, Denmark.*) Action potentials in pathological postural reflex activity (spasticity and rigidity.) *Acta psychiat., Kbh.*, 1946, 21, 151-175.—An electromyographic study of 56 patients with spastic conditions and 47 patients with rigidity leads to the conclusion that both conditions "are peripherally initiated variations of normal postural reflex activity and explained by the release from extrapyramidal inhibition." In rigidity there are also innervation disorders in the form of rhythmic discharges with slight innervation. Spastic and normal muscles will show single oscillations under these conditions.—*A. L. Benton.*

3543. Evans, Marsee Fred. (*Birmingham-Southern Coll., Birmingham, Ala.*) Problems in cerebral palsy. *J. Speech Disorders*, 1947, 12, 87-103.—After reviewing the principle etiological factors, the types of cerebral palsy and the present day therapeutic procedures, the author presents at some length some of the more common problems which the speech pathologist encounters in the cerebral palsied indi-

viduals. The difficulty in making a definite prognosis in cerebral palsy is stressed. Although the speech defects are frequently found that are essentially similar to those found in other individuals, the cerebral palsied cannot be dealt with in the same manner because of the organic brain involvements. The usual speech correction techniques do not often prove satisfactory. Definite principles of treatment are indicated including the role played by relaxation, coordination exercises, and through a coordinated training program in speech correction carried on by all members of the staff under the counsel of the speech pathologist. 27 references.—*M. A. Seidenfeld.*

3544. Roseman, Ephraim & Woodhall, Barnes. The electroencephalogram in war wounds of the brain; with particular reference to post-traumatic epilepsy. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 200-219.—A review of the literature indicates that the incidence of epilepsy following dural-cortical penetration ranges from 35-50%, with a probable mean of 44%; approximately half of these post traumatic disorders appear within one year following injury. Of the 75 cases reported here, 40% showed focal EEG abnormalities. The appearance of clinical epilepsy was predicted from the EEG in 7 cases. Paroxysmal activity was not usually noted until after the initial non-specific delta reaction had subsided. On the basis of 27 cases studied before and after tantalum plate cranioplasty, no direct effects were noted. It is suggested that, for patients with focal EEG abnormalities, but without clinical epilepsy, prophylactic anti-convulsant medication is indicated. 18 references.—*C. E. Henry.*

PSYCHOSES

3545. Arnfred, Axel H. (*Mental Hospital, Nykøbing, Sealand.*) A case of matricide the perpetrator of which subsequently proved to be a schizophrenic. *Acta psychiat., Kbh.*, 1946, 21, 21-38.—Discussion of a case best described as a transition form between schizoid personality and schizophrenia.—*A. L. Benton.*

3546. Delgado, Honorio, & Guerra, L. A. Esquizofrenia paranoide y sexo. (Paranoid schizophrenia and sex.) *Rev. Neuro-Psiquiat., Lima*, 1946, 9, 196-201.—Of 100 cases of paranoid schizophrenia 64 (32 male and 32 female) have been studied to the point where something preliminary can be reported as to the frequency with which the manifest content of this psychic abnormality is of a sexual nature and as to differences which exist between the sexes in the frequency of sexual content. 11 males and 8 females lacked sexual themes absolutely. The delusion of impregnation by God as symbol of the father, is manifested with obviously greater frequency among the women than among the men. Around 50% of the men exhibit a tendency to homosexuality in the sense of complaining of being attacked by men while just as many women tend to complain of heterosexual assault. Both men and

women react with irritability against these alleged aggressions. Women make more reference to their own body than do men (hypochondriacal notions, disturbance of body image or pseudoperceptions). Women also give themselves freer expression in word and deed than do men. Unmarried women exhibit more fantastical sexual content than do the married women. Males from rural areas present no homosexual content. While recognizing the heavy incidence of sexual themes in paranoid schizophrenics, the author refrains from the formula of Rosanow namely, that schizophrenia is a sexual psychosis.—*F. C. Sumner.*

3547. Delgado, Honorio, & Carrillo-Broatch, A. *Narcodiagnóstico de la remisión en las psicosis.* (Narcodiagnosis of remission in psychoses.) *Rev. Neuro-Psiquiat., Lima*, 1946, 9, 355-368.—The authors report the results of their use of narcoanalysis in diagnosing whether psychotic patients psychiatrically treated are in reality completely freed of their symptoms. The subject is maintained in an approximately normal state rather than in a twilight or hypnotic state and examined for more than 3 hours. Results obtained by narcoanalysis on 16 psychotics presumed as cured were as follows: 1 was found still definitely suffering from schizophrenia; 4 evidenced complete abatement; 10 raised doubts as to their cure or else revealed either dissimulation or a reactivation of latent morbid dispositions; 1 was found to be wrongly diagnosed as paranoid schizophrenia when he was in reality a case of psychopathic personality. The authors believe this diagnostic method can be of great value in forensic psychiatry as well as in safeguarding society from the premature discharge from mental hospitals of patients not yet thoroughly cured. On the other hand, warning is given of the danger of reactivating a psychosis by this narcodiagnostic procedure.—*F. C. Sumner.*

3548. Gregersen, Marie Benedicte. (University Clinic, Copenhagen, Denmark), & Strömberg, Erik. *Eine Kindepsychose, ihr Verlauf und ihre Behandlung.* (A child psychosis; its course and its treatment.) *Acta psychiat., Kbh.*, 1944, Suppl. 32. Pp. 177.—The case of a boy with an "atypical" psychosis who was treated over a period of 6 years is described in detail. Outstanding features of the psychosis were the marked anxiety and hyperactivity, the disturbed speech and paranoid attitudes. There is an introduction by H. Helweg which calls attention to the need in child psychiatry for intensive case reports such as this one and a medical evaluation by Erik Strömberg in which the possibility of an organic basis for the psychosis is advanced.—*A. L. Benton.*

PSYCHONEUROSES

3549. Appel, John W. A note on the teleology of combat incurred neuroses. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 125-138.—Fourteen case studies of men with widely varying backgrounds and amounts of exposure to combat are presented

to show the absence of teleologic significance in their breakdown. These men were seriously sick, all complained specifically of "shells" and they characteristically showed good insight into the origin of their condition. The essential pathology is psychological rather than physiological, with damage to the personality. Since neurotic gain mechanisms appeared to be absent the question is raised as to whether these cases represent genuine psychoneuroses.—*C. E. Henry.*

3550. Braatoy, Trygve. Technical tricks in the examination of neurotics. *Acta psychiat., Kbh.*, 1946, 21, 91-130.—Characteristic findings in the examination of the tendon reflexes and of the respiratory movements of psychoneurotics are described and their clinical significance discussed.—*A. L. Benton.*

3551. Brill, Norman Q., & Farrell, Malcolm J. Neurotic-reactions in psychopaths (hystero-malingering). *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 11-25.—From a military standpoint, it is immaterial whether a disorder is consciously or unconsciously determined. Malingering and hysteria may be conceived as distant points on a curve; there is a gradual clinical transition from one to the other. Past performance is the best clue to the type of mental process operating in a given case. Malingering is most often associated with or is part of a psychopathic personality. Consistently "wrong" answers to mental tests and consistent inversions to certain aspects of the neurological examination, plus lack of response to hypnosis and sodium amytal are very suggestive of malingering. 8 case histories.—*C. E. Henry.*

3552. Chapman, William P., Cohen, Mandel E., & Cobb, Stanley. (Massachusetts General Hosp., Boston, Mass.) Measurements related to pain in neurocirculatory asthenia, anxiety neurosis, or effort syndrome: levels of heat stimulus perceived as painful and producing wince and withdrawal reactions. *J. clin. Invest.*, 1946, 25, 890-896.—The level at which patients with neurocirculatory asthenia, effort syndrome, or anxiety neurosis perceive the heat stimulus as painful is the same as that for control subjects. In contrast, the level at which the neurocirculatory asthenia patient reacts to the heat stimulus (winces, pulls away) is lower than that for the control subjects, this difference being most marked in chronic NCA and less in acute NCA. It is revealed that NCA patients with nervousness as the chief complaint wince at a lower level than do NCA patients with other chief complaints; that the reaction of NCA patients at a low stimulus level offers a quantitative correlate of the clinical impression of the patients' inability to stand discomfort; that this test may be of use in establishing the diagnosis of neurocirculatory asthenia, effort syndrome, or anxiety neurosis.—*F. C. Sumner.*

3553. Floch, Maurice. (Detroit House of Correction, Plymouth, Mich.) Imprisoned abnormal drinkers: application of the Bowman-Jellinek classification schedule to an institutional sample. Part II.

Illustrative case histories and conclusions. *Quart. J. Stud. Alcohol*, 1947, 8, 61-120.—16 cases are presented in detail to illustrate aspects of the drinking behavior and treatment possibilities of alcoholics classified according to the Bowman-Jellinek types (see 17: 166), chosen from the 273 cases statistically treated previously (see 21: 2749). 15 references.—*W. L. Wilkins.*

3554. Greenhill, Maurice H. (Duke U., Durham, N. C.) **Clinical features of the psychoneuroses in World War II veterans.** *N. C. med. J.*, 1946, 7, 585-590.—100 cases diagnosed "psychoneurosis" were selected at random from among the 700 veterans with neuropsychiatric disabilities seen at the Duke Rehabilitation Clinic since July, 1944. Psychoneurotic symptoms during service as indicated by military discharge diagnoses were compared with the psychoneurotic symptoms after service. When 15 or more veterans had the same complaint either during or after service, the complaint was considered as a common one. Of the 18 psychoneurotic complaints found common there was a decrease in number of veterans complaining after service of insomnia, anxiety dreams, anorexia, nausea, backache, tremor, palpitation, while there was an increase in number of veterans complaining after service of irritability, sensitivity to noise, dislike of crowds, weakness, depression, dizziness, headache, excessive perspiration, fatigability, restlessness. The psychoneuroses of combatants are more severe both in service and after service than those of non-combatants, but combatants tend to improve after service whereas non-combatants do not.—*F. C. Sumner.*

3555. Grinker, Roy R. **A dynamic study of war neuroses in flyers returned to the United States.** *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 26-37.—While combat neuroses may be ascribed to the effects of extreme stress on relatively normal personalities, there is a much more frequent type of neurosis which appears only when the individual returns with his combat altered personality to the relatively safe and normal non-combat environment. The strong passive dependent needs of such men become the source of severe conflicts; these needs may be expressed in gastric language and exacerbated by the possibilities of secondary gain. Other techniques of displaced gratification and ego defensive measures involve precipitous marriage, alcoholism, aggression against civil and military life, and marked free anxiety. The loss of group and father figure support places intolerable strain on his own weak ego; therapy should therefore consist of supplying new and acceptable groups he can join and the creation of new internal resources and ideals.—*C. E. Henry.*

3556. Koller, A. **Zur psychologischen Beurteilung des Alkoholismus und des Alkoholikers.** (A psychological appraisal of alcoholism and of the alcoholic.) *Gesundh. u. Wohlf.*, 1945, 25, 565-574.—Psychoanalytic and individual psychology theories of the psychogenesis of alcoholism stress cravings of the individual to forget feelings of guilt and in-

feriority, to allay self reproaches, to prove courage, to demonstrate masculinity, to escape reality, and treatments of alcoholics based on such psychological causes are considered by the author as applicable to only a few isolated cases of alcoholism. One should not restrict one's horizon to a few cases and overlook the grand scale cause of alcoholism in the mass of alcoholics, namely the prodigious suggestive power of drinking-fashions which are promoted in ever more alluring ways by the alcohol industry. Admitting that a general alcohol-prohibition has been demonstrated in America as unenforceable and therefore undesirable, the author advocates as an effective mass-prophylactic against alcoholism a vast campaign of counter-propaganda in the interest of the national health.—*F. C. Sumner.*

3557. Pasquarelli, Blaise, (Federal Reformatory, Chillicothe, O.) & Bellak, Leopold. (St. Elizabeth's Hosp., Washington, D. C.) **A case of co-existence of idiopathic epileptic and psychogenic convulsions.** *Psychosom. Med.*, 1947, 9, 137-139.—A case report of a 29 year old female colored patient whose condition on the basis of history and symptomatology showed a clear differentiation between co-existing idiopathic epileptic and psychogenic convulsions. "The apparently genuine idiopathic cerebral dysrhythmia existed since the age of 4 or 5" but co-existed recently with a different series of apparently hysterical convulsions precipitated by an emotional trauma.—*P. S. de Q. Cabot.*

3558. Poponoe, Paul. **Heredity and environment as related to alcoholism.** *Eugen. News*, 1946, 31, 35-38.—The author makes the following definite points: (1) That alcohol does not change the germ plasma in such a way as to produce defective offspring has been demonstrated by long continued laboratory experiments with mammals and supported by studies of children of alcoholics; (2) That studies of direct inheritance of a predisposition toward alcoholism are inconclusive but that "individuals from alcoholic families need to take much greater precautions than others"; (3) That general measures of mental hygiene will tend to reduce the problem of alcoholism; (4) That alcohol is a reasonably effective but expensive and wasteful instrument of natural selection in eliminating strains which have mental disease and various kinds of personality disorders.—*M. V. Louden.*

3559. Sal y Rosas, F. **Un caso de neurosis traumática.** (A case of traumatic neurosis.) *Rev. Neuro-Psiquiat.*, Lima, 1946, 9, 416-425.—Abstract and discussion.

3560. Senerchia, Fred F., Jr. **An experimental unit for the retraining of psychoneurotic soldiers.** *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 87-93.—This retraining unit stressed vocational rather than basic military training. Approximately 60% of the psychoneurotic soldiers were returned to duty within the continental limits of the U. S. A high correlation was found between salvagability and morale; only 7.5% of those with good morale failed to adjust, whereas 83.2% of the cases with poor

morale failed. Psychoneurotics with a strong superego drive to fulfil social obligations are good risks, while self absorbed neurotics are poor risks. The most favorable outcome, with a salvage of 95.6%, was found in the uncomplicated anxiety states. With more severe anxiety the rate dropped to 57.8%. The poorest prognosis (2.8% salvage) was found when severe anxiety was complicated by emotional instability.—C. E. Henry.

3561. Stern, E. *Le bourreau domestique; observation et analyse d'un cas.* (The domestic tyrant; observation and analysis of a case.) *Z. Kinderpsychiat.*, 1947, 13, 197-204.—A girl, youngest child among much older siblings, daughter of wealthy parents, at the age of 11, developed hostile feelings toward her entire family. At the age of 18, when the girl came to the author for psychiatric treatment, her malicious attitude toward her family, paralleled by gentleness toward other people, amounted to a severe character disorder. The etiology and therapy of this case is presented.—R. Lassner.

3562. Thompson, Lloyd J. *Concerning combat exhaustion.* *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 139-146.—The use of the term "exhaustion" on the Emergency Medical Tag of the psychiatry casualty is explained and justified. Aside from the variable natural endowment which each man takes into battle, there is the accumulated fatigue, loss of sleep, inadequate diet, dirt, general nervous strain, and possibility of blast concussion. Clearing stations shortly behind combat lines return over 60% of patients to combat duty, while hospitals return 80-90% of these cases to duty.—C. E. Henry.

3563. Whitehorn, John C. *Changing concepts of psychoneurosis in relation to military psychiatry.* *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 1-10.—One reason for the difficulties involved in establishing adequate NP screening procedures has been the tendency in psychiatry to set up mutually exclusive concepts and diagnostic categories, with the result that much variability developed. Using broadly based and generally agreed upon concepts, a triangular relationship between Situation, Reaction and Personality is suggested as a systematic way of evaluating each individual case. The relative importance of each of these factors with their subheadings may readily be coded to facilitate diagnosis and to maintain secrecy.—C. E. Henry.

PSYCHOSOMATICS

3564. Barker, Roger G. (Clark U., Worcester, Mass.) *The somatopsychologic problem.* *Psychosom. Med.*, 1947, 9, 192-196.—Four kinds of relationship between extracerebral neural physique and behavior are presented: (1) dynamically independent and statistically uncorrelated, (2) dynamically independent within the individual and statistically correlated in massed data, (3) physical determinants of behavior through action upon peripheral neuromuscular mechanisms and acting as a social stimulus, (4) behavioral determinants of physique.

Somatopsychological problems dealing with the social psychology of physique should be further explored. The author gives a brief report of observations on the differences between a pair of female identical twins one of whom had had an attack of osteomyelitis at the age of 9. The disabled twin was less socially and emotionally mature, more introverted, passive, subservient, and socially conscientious than the physically normal twin.—P. S. de Q. Cabot.

3565. Bruch, Hilde, & Hewlett, Irma. (Coll. Physicians & Surgeons, New York.) *Psychologic aspects of the medical management of diabetes in children.* *Psychosom. Med.*, 1947, 9, 205-209.—By means of extensive interviews with 21 children whose ages ranged from 4 to 14 years and who had been sick from 1 to 10 years and with other members of the families the authors found that the way in which the family accepted the diabetes and followed the treatment regime was a good index of family relationships. "In emotionally disturbed families poor cooperation becomes a center of existing conflicts, and is frequently associated with poor regulation." In cases where the family follows a medical program to the letter as indicating a repressive perfectionistic attitude toward the child a more lenient regime is suggested so that the diabetes can be accepted with less guilt and anxiety thus favoring the child's normal personality development.—P. S. de Q. Cabot.

3566. Ewalt, Jack R., Randall, Guy C., & Morris, Harry. *The phantom limb.* *Psychosom. Med.*, 1947, 9, 118-123.—After reviewing various theories of the etiology of the phenomenon of the phantom limb, the authors report that among 2284 amputees of whom 404 had had detailed psychiatric examinations, phantom sensation occurred in practically all cases while spontaneous complaints of pain were rare. Two cases are cited to support the contention that "phantom pain is merely the interpretation of a phantom sensation by certain individuals" whose psychopathological symptoms were evident regardless of the type of external treatment.—P. S. de Q. Cabot.

3567. Gibb, William T. (1834 Connecticut Ave., N. W., Washington, D. C.) *Functional derangement of digestion.* *Amer. Practit.*, 1947, 1, 542-548.—In the absence of an organic basis disorders of the gastro-intestinal tract are psychogenic i.e. due to emotional conditioning extending often as far back as infancy. With 60% of an office practice consisting of functional disorders such as these the medical student should be given more training than he now receives in the recognition and management of functional maladies.—F. C. Sumner.

3568. Gilbert, Robert S. (17 East 89th St., New York.) *Oral lesions of psychogenic origin.* *Dent. Surv.*, 1947, 23, 259.—The case of an actor who intermittently suffered a large ulcerative lesion in the area of the bicuspid teeth on left side is reported. Physical examinations of many kinds proved negative. It was later during a radio broadcast that

patient suffered "mike fright" and lost his voice completely. Deep psychotherapy over 12 months cleared up all the patient's difficulties including the oral lesion.—F. C. Sumner.

3569. Groen, J. (Wilhelmina Gasthuis, Amsterdam, Holland.) Psychogenesis and psychotherapy of ulcerative colitis. *Psychosom. Med.*, 1947, 9, 151-174.—A report on 6 cases of ulcerative colitis with special emphasis on the character structure of the patients and the emotional situations experienced by them preceding the onset of the colitis. The investigator, without psychoanalytic training, used the method of biographical anamnesis with no dream analysis and the minimum of free associations. In each case an emotional trauma had produced a specific internal conflict prior to the onset or recurrence of the disease and all patients had the following characteristics: (1) well developed intelligence, (2) exaggerated carefulness and neatness, (3) extreme sensitivity, (4) an unbalanced attitude toward self-evaluation, (5) extraordinary egocentrism, (6) a passive life-attitude, (7) fear, (8) lack of aggression, (9) need for love and sympathy, (10) an idealistic conception of love, (11) strong mother fixation. 4 of these cases improved rapidly after simple supportive psychotherapy. 23 references.—P. S. de Q. Cabot.

3570. Hamburger, Walter W., Jr. Psychosomatic medicine in an Army hospital in India. *Psychosom. Med.*, 1947, 9, 124-130.—A review of the charts of 1266 consecutive patients admitted to medical wards in a General Medical Section of an Army hospital in Assam, India showed that approximately 1 out of every 4 had had emotional factors in illness dues to an unconscious attempt to solve a conflict between personal incentives and group military objectives resulting in a chronic state of tension. Stress in a non-combatant area leading to psychological breakdown is explained by a description of a soldier's life in India characterized by poor military objectives, monotony, sub-tropical physical discomforts, and homesickness. The author analyses the characteristics of the soldier-patient with an emphasis upon the secondary gains of illness, describes the differences between the goals of the civilian and Army doctor, outlines the treatment program for emotional illnesses, and makes suggestions for better prophylaxis and the management of psychosomatic ailments seen in the Army overseas. 23 references.—P. S. de Q. Cabot.

3571. Kaufman, M. Ralph. (Mt. Sinai Hosp., New York.) "Ill health" as an expression of anxiety in a combat unit. *Psychosom. Med.*, 1947, 9, 104-109.—By means of an anonymous questionnaire only 7% of the veterans in a Division in the Pacific said they were in good health after a period of rest and rehabilitation. The majority of them declared they were in good physical condition before entering combat. The author concludes that the low percentage is related to "the presence of many psychosomatic manifestations of anxiety or psychoneurotic difficulties."—P. S. de Q. Cabot.

3572. Kaywin, Louis. (Winter Hosp., Topeka, Kan.) Emotional factors in urticaria; a report of three cases. *Psychosom. Med.*, 1947, 9, 131-136.—3 cases of urticaria with emotional factors are given. Common features likely to be useful in recognizing and evaluating the role of the emotions in this type of skin disorder are: (1) the sudden appearance of symptoms with no previous allergic manifestations, (2) the precipitation of the symptoms by a particularly frustrating experience, (3) a shy relatively immature, passively dependent personality with a tendency toward exhibitionism, (4) a history of unhappy circumstances provoking anxiety. Treatment should not necessarily be concerned with a separation of the allergic and emotional factors but with the recognition and the positive evaluation of the role assigned to the emotions. The patient must be treated as a whole.—P. S. de Q. Cabot.

3573. Menninger, William C. (Menninger Clinic, Topeka, Kan.) Psychosomatic medicine: somatization reactions. *Psychosom. Med.*, 1947, 9, 92-97.—A presentation of the nature and history of the concept of psychosomatic medicine which has been given added emphasis during World War II. "The types of functional organic complaints seen in the Army were no different from those in civilian life." 4 groups of emotional or psychological expressions involving bodily systems seen by the internist included the cardiovascular and gastrointestinal, the allergies, and the aches and pains covered by the cephalalgias, arthralgias and myalgias. The author outlines an educational program to provide for the most effective treatment of psychosomatic problems and lists with brief notes, categories and sub-categories of "somatization reactions."—P. S. de Q. Cabot.

3574. Mitchell, John H., Curran, Charles A., & Myers, Ruth N. (Coll. Med., Ohio State U., Columbus.) Some psychosomatic aspects of allergic diseases. *Psychosom. Med.*, 1947, 9, 184-191.—An interim report of an analysis of 100 consecutive cases of each of 6 common allergic syndromes: ragweed hay fever, perennial extrinsic asthma, perennial vasomotor rhinitis, intrinsic asthma, chronic urticaria, and atopic eczema. A comparison between the positive and negative skin-reaction groups showed: (1) the negative skin-reaction group expressed a variety of illnesses and complaints and responded less to treatment than the positive skin-reaction patients whose complaints were not so varied; (2) the negative skin-reaction and multiple-complaint group had many features indicating psychological maladjustment; (3) while the positive skin-reaction group seemed to be well balanced according to age and sex the negative skin-reaction group seemed to have more women than men especially in the middle-age range.—P. S. de Q. Cabot.

3575. Mittelman, Bela, Weider, Arthur, Brodman, Keeve, Wechsler, David, & Wolff, Harold G. Personality and psychosomatic disturbances in patients on medical and surgical wards: a survey

of 450 admissions. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 304-310.—Psychiatric interviews were given to 450 admissions to medical and surgical wards; 20% were found to have mild, and 10% severe, neuroses. Of these, about one-third had pre-existing personality problems and one-third were precipitated by infection or trauma. All patients revealed conflict between group ideals and the desire for protection, though not all were aware of this conflict.—C. E. Henry.

3576. Sandler, Samuel A. **Camptocormia, or the functional bent back.** *Psychosom. Med.*, 1947, 9, 197-204.—4 brief case studies illustrate the psychological factors in camptocormia which is an hysterical phenomenon of functional origin and which is indicated by pain in the lumbar region and a bent back which may or may not be precipitated by trauma. Ambivalent feelings towards the father represented in a military situation by projected resentment in relation to officers symbolic of authority, possible latent homosexuality and castration anxiety, and the presence of impotentia preceding or concomitant with the onset of camptocormia characterize the phenomenon which is occasionally seen in civilian life following industrial and other kinds of accidents.—P. S. de Q. Cabot.

3577. Seguin, C. A. **Sobre las posibilidades del diagnóstico psico-somático.** (On the possibilities of psychosomatic diagnosis.) *Rev. Neuro-Psiquiat.*, Lima, 1946, 9, 392-395.—Abstract.

3578. Strong, G. F. **The role of the emotions in the production of cardiovascular disturbances.** *Canad. med. Ass. J.*, 1946, 55, 344-348.—Sudden fright producing palpitation and tachycardia is an obvious example of the role of the emotions in the production of cardiovascular disturbances. The effect of long continued fear, tension, or anxiety in the production of persistent cardiovascular symptoms is equally obvious and is the commonest cause of functional heart condition, particularly neuro-circulatory asthenia. While the symptoms of a functional heart condition resemble those of organic conditions, a careful study of the symptoms will show important and definite differences, chief of which are the absence of real structural damage, tense anxious facial expression, and a history of emotional tension. Failure to diagnose the condition as functional may contribute to its aggravation.—F. C. Sumner.

3579. Zelig, Meyer A. (U. California Med. Sch., San Francisco.) **Central angiospastic retinopathy; a psychosomatic study of its occurrence in military personnel.** *Psychosom. Med.*, 1947, 9, 110-117.—Four illustrative cases of Marines with macular retinopathy are cited as psychosomatic studies. When the ocular symptoms first developed, fear and anxiety induced by combat had been prominent in each patient's life. "Spasm of retinal arterioles represents focal manifestations of an existing peripheral vasospastic state and the condition is nosologically comparable to many other forms of peripheral vasoneuropathy which appear in

situations of emotional stress." 19 references.—P. S. de Q. Cabot.

SPEECH DISORDERS

3580. Backus, Ollie L., (U. Michigan, Ann Arbor.) & Dunn, Harriet M. **Intensive group therapy in speech rehabilitation.** *Speech Disorders*, 1947, 12, 39-60.—The use of intensive group therapy as a fundamental technique for the correction of disturbances of speech is supported by the results of these investigators. The rationale for such practice is based on the frequency with which common problems are found in the individuals with speech pathology. To correct these "certain basic techniques should be applied in the treatment of all speech disorders." The authors point out that intensive group therapy "provides a good opportunity (a) to study the patient and his particular needs, (b) to convince the patient of his problems and needs, and (c) to teach the patient how to carry over new speech patterns into real life situations." The values of this procedure from the standpoint of affording a good teacher training situation and for research are also discussed.—M. A. Seidenfeld.

3581. Honig, Phoebe. (Brooklyn Coll., Brooklyn, N. Y.) **The stutterer acts it out.** *J. Speech Disorders*, 1947, 12, 105-109.—Adapting the psychodramatic techniques of Moreno to the speech clinic it has been possible for the author to supply the stutterer with a more clear understanding of the stress situations which have precipitated or accentuated stuttering. This technique appears to be most useful with the individual who stutters in unfavorable social situations (the situational stutterer). The author describes briefly the technique used for establishing rapport and leading the subject into cooperation in the psychodramatic structure. 12 references.—M. A. Seidenfeld.

3582. Moore, Charles E. A. (Proviso Township High School, Maywood, Ill.) **Reading and arithmetic abilities associated with speech defects.** *J. Speech Disorders*, 1947, 12, 85-86.—The question of the extent to which a speech handicap may reduce effective performance in other fields of endeavor is of clinical interest. In this study 236 speech handicapped high school students were given the Iowa Silent Reading Test and the Bruecker-Van Wagenen Arithmetic Test. Neither the students with articulatory disturbances nor those with voice abnormalities gave any evidence of retardation in the Iowa Silent Reading Test, having achieved a median score of 9.9 which was identical with the median attained in the last 4 years by all entering freshmen in the Proviso Township High School. Similarly, in both arithmetic reasoning and computation as measured by the Bruecker-Van Wagenen Arithmetic Test, the median scores of the speech disability group were actually higher than those obtained by all freshmen in the 4 preceding years. The hard-of-hearing group and those with diagnoses of feeble-mindedness did, as would be expected, fall considerably below average.—M. A. Seidenfeld.

3583. Morris, D. W. (Ohio State U., Columbus.) The speech sciences and other educational and community functions. *J. educ. Res.*, 1947, 40, 608-614.—Speech is an extremely complex activity, and in consequence many workers are interested in problems relating to speech: medical specialists such as otologists, surgeons and neurologists; dentists, particularly specialists in orthodontia; physicists working in acoustics; social workers, teachers, and psychologists. Since so many specialists are engaged in the speech sciences there is great need for broad understanding and close cooperation.—M. Murphy.

3584. Peacher, Georgiana. (Neuro-physical Rehabilitation Clinic, Philadelphia, Pa.) Contact ulcer of the larynx: I. History. *J. Speech Disorders*, 1947, 12, 67-76.—The historical background including the basic clinical data on etiology, diagnosis, and treatment of this pathological process occurring at times in those who tend to overuse their voice is reported. This lesion has according to the author been "frequently overlooked altogether. . . . Vocal abuse appears to be the exciting cause." A list of historical references on this subject is included. 16 references.—M. A. Seidenfeld.

3585. Platt, James H. (Michigan State Coll., East Lansing, Mich.) The history and principles of obturator design. *J. Speech Disorders*, 1947, 12, 111-123.—The use of dental prosthetic appliances called *obturators* for the purpose of aiding the pharyngeal and palatal muscles in securing the closure of the naso-pharyngeal port is discussed. The historical developments in the use of these devices are given at length and 19 references help to supply a rather complete resume of this technique. The close working relationship between the speech pathologist and the prosthodontist is stressed particularly as this is essential if the patient is to attain satisfactory functional results. Hand in glove with the closure of the cleft-palate by surgical or mechanical means goes the necessity for overcoming the psychological difficulties, including a sense of inferiority, faulty speech habits and a feeling of being different. Proper oral muscle development and speech training plus proper fitting of the *obturator* will yield the best results. 19 references.—M. A. Seidenfeld.

3586. Robbins, Samuel D. (Emerson Coll., Boston, Mass.) Principles of nomenclature and of classification of speech and voice disorders. *J. Speech Disorders*, 1947, 12, 17-22.—The Nomenclature Committee of the American Speech Correction Association has formulated a systematic international classification of the disorders of speech and voice. This classification "consists as far as possible of monomial technical terms derived from the Greek and should be primarily causal rather than descriptive." In addition the Committee recommends, "that all technical terms for speech and voice disorders shall begin with a descriptive prefix which depicts the most outstanding symptom of the disorder, and shall end with a root word which states

the cause of the disorder." Robbins describes in some detail the techniques for establishing nomenclature in this field.—M. A. Seidenfeld.

3587. Schuell, Hildred. (Washington High School, South Bend, Ind.) Sex differences in relation to stuttering: Part II. *J. Speech Disorders*, 1947, 12, 23-38.—This paper continues the author's earlier studies on attitudes toward stuttering (see 21: 1494). 3 investigations of parent-child relations, using questionnaires and interviews, especially relating to stuttering are reported. The author believes that the data do not support the common assumptions of difference between boys and girls. The data support Johnson's (see 20: 3741) theory of the etiology of stuttering. A number of interesting hypotheses are suggested for the difference in the frequency of occurrence of stuttering in the two sexes.—M. A. Seidenfeld.

3588. Stevens, Elisabeth. (U. Kansas, Lawrence.) Psychodrama in the speech clinic. *Sociatry*, 1947, 1, 56-58.—Speech difficulties without a gross somatic basis seem representative of a more basic personality maladjustment. Conventional interview-counseling tends to emphasize the symptom, often leans on mechanical devices, and depends on the patient's ability to verbalize. The mute situation in psychodrama avoids these pitfalls and helps the patient see his problems in better perspective.—R. B. Ammons.

MENTAL HYGIENE

3589. Adlerblum, Evelyn Davidson. (Bd. Education, New York.) A mental hygiene project in a city public school. *Understanding the Child*, 1947, 16, 75-78.—A report is made on a mental hygiene project at the kindergarten level in a N. Y. City public school. The project entailed: (1) breaking down the large class into small groups to enable individual observation; (2) stimulating imagination, thinking and emotional release through play and discussion; (3) helping to develop further reading readiness; and, (4) exploring the underlying factors which caused poor adjustment, "working with fears and hostilities through reassurance, acceptance and interpretation levelled at the five-year-old's range of understanding." Experience indicates the desirability of having a mental hygiene program which simultaneously helps children and their teachers.—C. L. Gewirtz.

3590. Ramm, Katherine M. Personality maladjustment among monotones. *Smith Coll. Stud. soc. wk.*, 1947, 17, 264-284.—25 "uncertain singers" in the fifth grade of Newark schools were given physical examinations, a music ability test, 3 paper and pencil personality tests, and a Rorschach. A case history emphasizing musical experience was taken also. There was no control group. The monotones generally had little previous experience with music and little musical talent. They disliked school, and there was some indication of a higher than average incidence of social and emotional problems.—M. R. Jones.

3591. Seidenfeld, Morton A. (*National Foundation for Infantile Paralysis, New York*.) The role of mental hygiene in health. *J. Hlth phys. Educ.*, 1947, 18, 295-296; 353-354.—The fact that selective service found 67.5 men out of every 1,000 examined in 1942-1943 suffering mental disturbances severe enough to cause rejection for military service alone makes it apparent that the problem of safeguarding the mental health of the nation warrants its inclusion as a major element in preventive public health programs. 6 realistic ways are proposed how the waste of man hours resulting from mental disturbance may be reduced or prevented: (1) realistic training of children and adolescents; (2) training of the young in self-understanding; (3) training of the child to sublimate troublesome drives; (4) establishment of standards of values and goals that are attainable with the individual's physical, intellectual, and motivational equipment; (5) the development of techniques for the measurement of the capacity to withstand ordinary stress situations; (6) training of the chronically ill how to live within the limitations of their illness.—*F. C. Sumner*.

3592. Whitney, E. Arthur. (*Elwyn Training School, Elwyn, Pa.*) Modern mental hygiene. *Med. Rec., N. Y.*, 1947, 160, 326-330.—The history of mental hygiene actually dates from early in the 19th century rather than from Beers's book "A Mind That Found Itself," but it still remains a sphere of general public unawareness or misinformation. Essential problems to be met are (1) the arousal of a genuine public interest leading to adequate financial support of public programs, and (2) the development of intensive research by physicians and psychologists.—*M. H. Erickson*.

THERAPY AND REHABILITATION

3593. Barton, Walter B. Convalescent Reconditioning Program for neuropsychiatric casualties in the U. S. Army. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 271-284.—Three different pilot studies were carried out to demonstrate that group techniques could successfully return well over 50% of open ward patients. Certain general principles were also made apparent, such as the importance of prompt treatment, situational factors, personal interest, proper assignment, and trial duty.—*C. E. Henry*.

3594. Berg, Charles. (*69 Harley St, London W. 1.*) Deep analysis. London: George Allen & Unwin, 1946. Pp. 261. 12s. 6d.—The whole of this book is devoted to the record of the psychoanalysis of a single case, that of a young man of considerable gifts and promise who nevertheless feels that life in general and women in particular have no interest for him. The analysis takes a satisfactory course through father and mother fixation, positive and negative transference, and at the end we hear that he marries happily and attains his unfulfilled promise. Thus a practical demonstration is given of the working of the Freudian theory and of its therapeutic value.—*M. D. Vernon*.

3595. Cornyetz, Paul. (*Brooklyn Coll. Brooklyn, N. Y.*) Action catharsis and intensive psychotherapy. *Sociatry*, 1947, 1, 59-63.—Many therapists depend on critical situations to produce massive abreactions. These in turn lead to the temporary disappearance of symptoms. Psychodrama makes extensive and continued use of action catharsis and spontaneity training. The patient practices overcoming difficulties and each abreaction is used to promote self-awareness.—*R. B. Ammons*.

3596. Cotton, John M. The Psychiatric Treatment Program at Welch Convalescent Hospital. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 316-321.—The organization of the treatment program at this hospital is outlined with respect to number and type of staff and the schedule of patient activities. Every effort is made to place each patient in a class where he cannot fail by taking account of his intellectual capacity, social background, and specific interests. The resulting ego inflation and social reorientation usually occurs in 6-8 weeks. While such therapy does not develop deep insight or basic personality change, it does assist in returning the patient to his previous level of behavior.—*C. E. Henry*.

3597. Esmarch, Ole. Considerations concerning psychotherapeutic methods. *Acta psychiat., Kbh.*, 1946, 21, 841-855.—The value of hypnosis as a psychotherapeutic method effecting lasting cures is defended and exemplified by a case report. The hypnotic sessions are preceded by training in conscious relaxation according to the method of J. H. Schultz (see 12: 359).—*A. L. Benton*.

3598. Friend, Maurice R., & Sullivan, Walter F. (*Vaughan General Hosp., Hines, Ill.*) Group psychotherapy in an Army general hospital relating to civilian readjustment. *Amer. J. Orthopsychiat.*, 1947, 17, 254-265.—This is an account of group psychotherapy with 13 groups totalling 250 soldiers in a military neuropsychiatric center. Work was particularly oriented toward readjustment to civilian life. Temporary psychotic reactions responded well to group therapy but long standing neuroses only profited on a most superficial basis.—*R. E. Perl*.

3599. Geoghegan, John J. (*Ontario Hosp., London, Ont.*) Manic depressive psychosis (manic phase) and electroshock. *Canad. med. Ass. J.*, 1946, 55, 54-55.—A case history of a manic depressive psychosis patient is presented in the form of a 20-year calendar in which the duration of manic phases is shown by black bars extending over the months of year. Various therapies including hydrotherapy, bromides, seclusion, wet packs, sedation, rectal narcosis, nembutal, sodium amytal, intravenous injections, and in early 1945 electroshock (petit mal) are seen as having doubtful effect on curving the manic excitement as compared with the results obtained with electroshock (grand mal) given in late 1945. The manic phase was cut short in a week as against the usual duration of 3 to 9 months.—*F. C. Sumner*.

3600. Greenhill, Maurice H., & Löwenbach, Hans. Neuropsychiatric rehabilitation problems of discharged veterans in rural communities of the South. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 322-339.—In this study of 421 NP veterans it was found that the customs and traditions of the South impose problems not susceptible of handling by techniques used in the industrial North. The thinly dispersed population, poor transportation, limited educational and occupational opportunities, and the special pension problems of rural areas are all factors to be considered in the treatment of these cases. Travelling therapeutic teams and widely dispersed clinics would be helpful.—C. E. Henry.

3601. Grinker, Roy R. (Michael Reese Hosp., Chicago, Ill.) Brief psychotherapy in psychosomatic problems. *Psychosom. Med.*, 1947, 9, 98-103.—"Qualitative factors which are specific for the development of psychosomatic disorders depend on the nature of the precipitating factor and on the preparation within the individual personality." Psychosomatic syndromes represent a regression to less mature adaptations. Until sufficient psychiatrists are available therapeutic short-cuts are recommended. A case history is included to demonstrate procedural steps in brief psychotherapy which appears to be less successful with middle-aged or elderly patients who, because of habitual reaction patterns, have greater difficulty than younger persons in a free direct mastery of the environment.—P. S. de Q. Cabot.

3602. Hahn, Milton E. (Syracuse U., Syracuse, N. Y.) & Kendall, William E. Some comments in defense of "non-directive" counseling. *J. consult. Psychol.*, 1947, 11, 74-81.—The present "conflict" between the directive and non-directive schools in clinical counseling is considered. 6 so-called differences, described as "straw men" by the authors, are discussed. The plea is made for fewer philosophical arguments and a concentration "on better case work and the desperately needed research to improve our practices." 17 references.—S. G. Dulsky.

3603. Harris, Herbert I. The importance of the emotional outlet in psychotherapy. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 156-161.—Current therapeutic methods for combat induced neuroses have been too largely influenced by psychoanalytic theory with its emphasis on present and past reactions. The increasing frequency with which "combat furor" recurs in veterans discharged as cured indicates the need for a therapy that stresses future adjustment rather than present desensitization. The medical and educational aspects of such therapy are briefly described.—C. E. Henry.

3604. Harrow, Gertrude Schwarz, & Haas, Robert Bartlett. (Ohio State U., Columbus.) Psychodrama in the guidance clinic; a refinement of the case history approach. *Sociatry*, 1947, 1, 70-81.—A case history was presented to guidance workers via psychodrama. A series of conflict situations

were acted out to show the client's feelings. Protocols of these sessions are reproduced. It is concluded that psychodrama can be directive to varying degrees, and that research is needed to determine the circumstances under which these varying degrees of directiveness are desirable.—R. B. Ammons.

3605. Kleinerman, Morris. (Saint Elisabeth's Hosp., Washington, D. C.) The present status of electroshock therapy. *Amer. Practit.*, 1947, 1, 299-302.—Electroshock therapy is being used extensively in all sorts of depression, in the manic stage of manic-depressive psychosis, and in schizophrenia. It has not been found useful in treatment of psychoneurotics. Contraindications to the use of ECT are enumerated. The complications, mostly consisting of fractures caused by the first sudden muscular contracture which takes place in ECT are listed as well as the precautions to be taken against such complications. The number of deaths attributable to ECT is minimal. ECT can be used in office practice for treatment of properly selected cases.—F. C. Sumner.

3606. Kubie, Lawrence S., & Margolin, Sydney. The therapeutic role of drugs in the process of repression, dissociation and synthesis. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 188-199.—"The processes of repression, dissociation and synthesis, which are the operating concepts in the genesis and therapy of the neuroses, apply equally to the patient under drugs. Drugs facilitate the recovery of that which has been repressed and dissociated by rendering the personality less vulnerable to the exposure of material which in the waking state may be intolerable. For the same reasons, interpretations (or syntheses) may be accepted and integrated without catastrophic disturbances. These facts permit the use of drugs in dynamic psychotherapy to circumvent resistances. The therapist who is dynamically oriented can control the therapeutic progress by balancing the adaptive capacity of the patient with the material exposed and with the therapeutic interpretations."—C. E. Henry.

3607. Kuehnle, Shirley, & Lowe, Hanna. Use of social service by mental patients on parole. *Smith Coll. Stud. soc. Wk.*, 1947, 17, 223-263.—Some of the patients paroled from Wayne County General hospital were supervised during the parole period by social case workers. This is a report of the use of this service by 115 paranoid and 50 catatonic patients. A slightly greater proportion of the catatonic patients used the service effectively. In general, less disturbed patients used the service more effectively. Numerous examples of how catatonic patients used the service are given.—M. R. Jones.

3608. Lawlor, Gerald W. (Brooklyn Coll., Brooklyn, N. Y.) Role therapy. *Sociatry*, 1947, 1, 51-55.—All people are called upon to play many different and often conflicting roles in everyday life. Difficulties arising can be minimized or alleviated by education in the nature of roles and by training in the playing of roles. Psychoanalysis is indicated only in those cases which cannot respond to role therapy,

and even here role therapy can serve as a useful supplementary technique.—R. B. Ammons.

3609. Linck, Lawrence J. (*National Society for Crippled Children and Adults, Inc., Chicago, Ill.*) Mobilizing our nationwide resources for service to the handicapped. *J. Speech Disorders*, 1947, 12, 11-16.—Individuals with physical and mental handicaps are an integral part of society. Therefore a twofold obligation on society must be met to (a) make some adjustments designed to create a more favorable environment, and (b) assist the handicapped in self-adjustment to social stresses. The handicapped are entitled to good physical health, personal security, opportunity for social participation, education, and vocational training and employment. The responsibility for bringing such a program to fruition rests upon our ability to make each individual citizen aware, interested and participant in its accomplishments.—M. A. Seidenfeld.

3610. Little, Harry M., & Knopka, Gisela. (*Child Guidance Center, Pittsburgh, Pa.*) Group therapy in a child guidance center. *Amer. J. Orthopsychiat.*, 1947, 17, 303-311.—After several years of experience with group therapy, the authors conclude that although the media used in group work are essentially the same as those in good recreational work, group therapy should be carried out only in a psychiatric setting and only under the leadership of a professionally trained and psychiatrically oriented person. It is not a time saving procedure nor a substitute for individual therapy.—R. E. Perl.

3611. Macdonald, Margherita Anne. Psycho-drama explores a private world. *Sociatry*, 1947, 1, 97-118.—A student compares experiences in working out a personal problem by psychodrama and non-directive counseling. Protocols of the two sessions are reproduced. Analysis is made of audience reactions and personal feelings in each case.—R. B. Ammons.

3612. McKenzie, Kenneth G., & Proctor, Lorne D. Bilateral frontal lobe leucotomy in the treatment of mental disease. *Canad. med. Ass. J.*, 1946, 55, 433-441.—27 cases comprising largely manic-depressives, involutional melancholics, schizophrenics, and anxiety-neurotics had been treated to no avail over a period averaging 3 years with every other recognized psychiatric therapy. With bilateral frontal lobe leucotomy 85% of the cases have shown improvement ranging from reduced nursing problems to complete recoveries. 13 of 27 patients considered hopelessly mentally ill have been returned to community life. Psychological testing before and after operation showed no significant gross defects in patients' intelligence other than a temporary impairment of orientation and memory lasting from 3 to several months. The only complication observed was that of a mild hypersexuality in 25% of the cases.—F. C. Sumner.

3613. Meiers, Joseph I. Reaching out for the psychodrama; instances of non-psychodramatic therapists spontaneously rediscovering psychodramatic techniques. *Sociatry*, 1947, 1, 64-69.—Such

psychotherapists as J. N. Rosen, F. J. Mott, D. Levy, S. Horwitz, and H. P. Rome have shown a tendency to "groupize" therapy. These people have not recognized the relation of their work to the extensive prior work of the psychodramatists. These distinguished workers in the psychiatric field will profit from more extensive utilization of the dramatic approach based on the "results of the ample work of their pioneer precursors, the psychodramatists."—R. B. Ammons.

3614. Moreno, J. L. (*Beacon, N. Y.*) Foundations of sociatry; an introduction. *Sociatry*, 1947, 1, 10-15.—Sociatry deals with socialized therapy, is remedial sociometry. Procedures must be tested systematically. Group psychotherapy varies widely as to subject, agent, and medium of therapy.—R. B. Ammons.

3615. Moreno, J. L. Note on "models" of reality. *Sociatry*, 1947, 1, 128.—Psychoanalysis adheres to a rigid reality model, whereas psychodrama recognizes the continuing role of spontaneity and creativity in the structure of the personality.—R. B. Ammons.

3616. Moreno, J. L. (*Beacon, N. Y.*) Open letter to group psychotherapists. *Sociatry*, 1947, 1, 16-30.—Group psychotherapy concerns itself with more than one individual. Barriers to this study have come from Alcoholics Anonymous and psychoanalysis. Psychoanalysts have sought inappropriately to apply concepts from individual psychology to group behavior. It is suggested that some of the important factors determining group organization are (1) tele, (2) "sociostasis," and (3) the sociodynamic effect. Therapists must receive special training in group dynamics in order to work effectively.—R. B. Ammons.

3617. Pearson, Manuel M., & Cohen, Robert A. Psychotherapy in a Naval Convalescent Hospital. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 181-187.—This paper gives a brief description of combat fatigue and the stresses which have served to induce it. Two forms of group therapy are outlined, one involving a full and active "masculine" approach and the other a discussional type. Approximately 60% of the patients are returned to duty, 6% to full duty. Of those surveyed, at least one half are much improved.—C. E. Henry.

3618. Raines, George N., Hohman, Leslie B., & Kolb, L. C., Jr. Methods of recovery in combat fatigue and the influence of therapy. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 171-180.—The critical signs of combat fatigue are outlined, and the distinction is made between the acute physiological disturbance and the more serious hospitalized cases with psychosomatic and affective complaints. Combat troops often handle the physiological phase without help and continue duty; in any event spontaneous recovery without specific medical help is the rule. Hospitalized cases may require sedation, sub-shock insulin therapy, and bed rest. Both individual and group psychotherapy is used. Strict military discipline is a definite aid, and helps demon-

strate to the patient that many of his symptoms are still under his control. Separation from the service does not of itself effect a cure.—C. E. Henry.

3619. Rome, Howard P. Psychopathology and group therapy. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 162-170.—Psychiatry, dealing as it has with the mentally ill, has tended to regard health and normalcy as the absence of disease. Such mental health is better regarded as a demonstrable positive quality which can and should be used to establish effective group psychotherapy. Just as the social circumstances prompting abnormal behavior must be taken into account, so can the social forces involved in group therapy be used advantageously. It is more expedient to treat man's socially structured disharmonies in a socially harmonized and mutually interacting group.—C. E. Henry.

3620. Rosenthal, Pauline. (Bellevue Hosp., New York.) The death of the leader in group psychotherapy. *Amer. J. Orthopsychiat.*, 1947, 17, 266-277.—Upon the death of Dr. Schilder, the writer, who had participated for several months in his group therapy sessions, attempted to adjust his abandoned patients to the death of the father-figure. The dreams, associative material and other productions of the 27 patients were recorded and four representative case reports are here presented. The death of the father was experienced as guilt and was followed by an attempt at obedience. The reaction would seem to be the expression of castration wishes superimposed upon the more immediate homosexual or incestuous strivings.—R. E. Perl.

3621. Shaskan, Donald A. The development of group psychotherapy in a military setting. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 311-315.—Group therapy and the latitude of verbal expression allowed the patient serves to relieve the psychoneurotic of his anxieties and nervous tension. These flexible and fluid groups are tolerant of their members. Another patient may grasp the meaning and significance of apparently unrelated expressions even before the psychiatrist. In a rigid military setting the protection and security offered by such a group is of great therapeutic value.—C. E. Henry.

3622. Shaskan, Donald A. (St. Dept. Health Guidance Clinic, Seattle, Wash.) Must individual and group psychotherapy be opposed? *Amer. J. Orthopsychiat.*, 1947, 17, 290-292.—The author recalls his experiences with group psychotherapy over the past decade and the conflict between psychoanalysis and group therapy to emphasize the need for realizing the deep though irrational conflict between group and individual methods.—R. E. Perl.

3623. Slavson, S. R. (Jewish Board of Guardians, New York.) Differential dynamics of activity and interview group therapy. *Amer. J. Orthopsychiat.*, 1947, 17, 293-302.—Using the 4 pillars of therapy, relationship, catharsis, insight, and reality testing, as a basis for comparison, the author describes activity group therapy, predominantly an ego

therapy, with interview group therapy, which deals more with the patient's libidinal fixations and difficulties.—R. E. Perl.

3624. Spence, Ralph B. (U. State of New York, Albany.) Psychodrama and education. *Sociatry*, 1947, 1, 31-34.—Education has been excessively verbal. By giving training in actual social behavior "psychodrama can help education develop those difficult skills of working together which are necessary in a democracy."—R. B. Ammons.

3625. Stewart, Kathleen K., & Axelrod, Pearl L. (Langley Porter Clinic, San Francisco, Calif.) Group therapy on a children's psychiatric ward; experiment combining group therapy with individual therapy and resident treatment. *Amer. J. Orthopsychiat.*, 1947, 17, 312-325.—Since many behavior patterns related to deep central anxieties are rapidly mobilized in group living situations on a children's ward but do not show themselves so quickly in individual therapy, group therapy was instituted to handle these problems more directly in a therapeutic setting, to see what effect it would have on simultaneous individual therapy, and to see what could be learned which could be related to the 24 hour handling of the children. Group therapy in this case seemed to mobilize more rapidly the "good mother" and "bad mother" feelings; the two opposed transferences are intensified in simultaneous group and individual therapy and worked through simultaneously with two different therapists, with marked acceleration of social recovery.—R. E. Perl.

3626. Tiebout, Harry M. (Blythwood, Greenwich, Conn.) The problem of gaining cooperation from the alcoholic patient. *Quart. J. Stud. Alcohol*, 1947, 8, 47-54.—The therapist has an initial responsibility of inducing in the patient a consciousness of a need for help, a realization of the inadequacy of his own methods, and of developing in him the capacity to accept help.—W. L. Wilkins.

3627. Toeman, Zerka. (Psychodramatic Institute, New York.) Psychodrama; its relation to stage, radio and motion pictures. *Sociatry*, 1947, 1, 119-126.—The first dialogue in a series showing the genesis of psychodrama in literature and art is reproduced. Principals are the author and J. L. Moreno.—R. B. Ammons.

CLINICAL PSYCHOLOGY

3628. Ackerly, Spafford. (Mental Hygiene Clinic, Louisville, Ky.) The clinic team. *Amer. J. Orthopsychiat.*, 1947, 17, 191-195.—The strength of the clinic team of psychiatrist, social worker, and psychologist, lies in the checks and balances inherent in its composition. Since the aim of psychiatric treatment is greater self-realization, psychiatry flourishes in a democracy. It is this type of regard for individual personality that can and does make democracy more than a political system or national cult.—R. E. Perl.

3629. Béno, N., Bersot, H., & Bovet, L. (Institut J. J. Rousseau, U. Geneva, Switzerland.) Les

enfants nerveux; leur dépistage et leur traitement par les services médico-pédagogiques. (Nervous children; their discovery and treatment by means of medical-educational service.) Neuchâtel et Paris: Delachaux et Niestlé, 1946. Pp. 182. Fr. 4.50.—Methods of collaboration of psychologists, psychiatrists, physicians, school nurses, social workers, school administrators, and parents are explained, in various parts of Switzerland including Geneva. There, the Institut Rousseau, established by Edouard Claparède, sponsors special classes for the backward and delinquent, fresh air schools, observational classes, clinics, guidance, research, training and certification of consultants, and other facilities for the intellectual, affective, physical and educational diagnosis and treatment of nervous children. Chapters are added on the history of the work, the personnel of workers, case studies and a discussion of nervous symptoms and disorders. The last section describes experimentation with the Düss test to disclose children's complexes through the interpretation of stories told by those children, with the aim of eventual therapeutic treatment.—G. E. Bird.

3630. Bluett, C. G. Pictures of the mind. *J. Rehabil.*, 1947, 13, No. 3, 4-10; 24.—A test battery consisting of the Revised Alpha (Number 5), Revised Beta, Gregg Test (writing a series of numbers rapidly), and the Purdue Peg Board is described and test results based upon 1000 physically handicapped clients are reported. Several test profiles are presented and discussed.—L. Long.

3631. Hutt, Max L. (U. Michigan, Ann Arbor.) A clinical study of "consecutive" and "adaptive" testing with the revised Stanford-Binet. *J. consult. Psychol.*, 1947, 11, 93-103.—I. Q. ratings obtained by "consecutive" (standard) testing and "adaptive" (modified) testing on Form L of the Revised Stanford-Binet Scale were compared on 630 cases. When applied to "total populations" or to very well adjusted cases the two methods yield comparable results. For poorly adjusted individuals the "adaptive" method yields higher I. Q. ratings which appear to be more valid for the cases studied.—S. G. Dulsky.

3632. Leitch, Mary, & Schafer, Sarah. (Meninger Clinic, Topeka, Kans.) A study of the Thematic Apperception Tests of psychotic children. *Amer. J. Orthopsychiat.*, 1947, 17, 337-342.—This is a comparative analysis of the formal characteristics of the production of a group of 15 psychotic and 15 maladjusted nonpsychotic children on the first 10 cards of the Thematic Apperception Test. It revealed the presence in the psychotics of disturbances in thought organization, emotion, and perception, which differentiated them from the non-psychotic group.—R. E. Perl.

3633. Morris, W. W. (U. Michigan, Ann Arbor.) A statewide program of psychological services for the blind. *Outlook for Blind*, 1947, 41, 144-145.—The Bureau of Psychological Services of the University of Michigan's Institute for Human Adjust-

ment established in 1946 the Division of Special Clinical Services. The purpose of this Service is to provide psychological services for all those who might be seriously handicapped in obtaining adequate help through the usual clinic procedures. At present the greatest emphasis is on developing a sound clinical program for the blind. Every effort is made to assess the total personality of the individual and through the coordinating activity of the State Division of Services for the Blind outside resources can be utilized to the full. Thus a more completely sociopsychological orientation of psychologists, social workers, and others is achieved.—K. E. Maxfield.

3634. Napoli, Peter Joseph. Finger painting and personality diagnosis. *Microfilm Abstr.*, 1946, 7, 39-42.—Abstract of Ed. D. thesis, 1945, New York U. Microfilm of complete thesis, 167 pages, \$2.09, University Microfilms, Ann Arbor, Mich. Publ. No. 801.

3635. Robbins, Lewis L. The Mental Hygiene Unit: a practical approach to the utilization of the mild psychoneurotic in the armed forces. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 78-86.—This is an account of how one Army Mental Hygiene Unit functions so as to return some 80% of referrals to duty. Extensive use is made of military psychiatric social workers. The clinical psychologist is used solely for aptitude and personality testing, never as a therapist. Primary emphasis is placed upon the manipulation of sociological rather than medico-psychological factors.—C. E. Henry.

3636. Webb, Wilse B. (U. Iowa, Iowa City.) A note on the Rabin ratio. *J. consult. Psychol.*, 1947, 11, 107-108.—The Rabin ratio, an index for indicating schizophrenia based on Wechsler-Bellevue test results, is applied to Rapaport's groups of schizophrenics and Kansas Highway Patrolmen. The schizophrenic group data support Rabin's proposed ratio, but the Patrolmen data give very similar results. Possible explanations are advanced. It is concluded that the Rabin ratio "as a generalized diagnostic tool may well prove dangerous if utilized in the clinical situations."—S. G. Dulsky.

3637. Weider, Arthur. Screening the neuro-psychiatrically unfit selectee from the Armed Forces. *Microfilm Abstr.*, 1946, 7, 76-79.—Abstract of Ph.D. thesis, 1945, New York U. Microfilm of complete thesis, 84 pages, \$1.05, University Microfilms, Ann Arbor, Mich. Publ. No. 804.

[See also abstracts 3338, 3375, 3379, 3475, 3477, 3482, 3483, 3504, 3506, 3514, 3646, 3687, 3689, 3700, 3701, 3710, 3714, 3753, 3755, 3757, 3779.]

SOCIAL PSYCHOLOGY

3638. Cameron, D. Ewen. Guilt and anxiety as social controls. *Canad. Nurse*, 1947, 43, 107-110.—Guilt and anxiety are still used and shall probably continue to be used as means of social control. The things we come to feel guilty or anxious about are

acquired through the experiences we encounter in living. In the use of guilt and anxiety to control conduct certain psychohygienic precautions must be taken if in making an individual good we do not wish to make him mentally ill. The use of criticism, the withholding of affection, the fostering of guilt-feeling on the part of parents may produce in their children, life-long guilt and anxiety neuroses. The author illustrates with a few cases the misuse by parents of guilt and anxiety as social controls. Another unhealthy consequence of the misuse of these two controls is seen in the danger of unfitting human beings to criticize social institutions and to build better ones.—*F. C. Sumner.*

3639. Chisholm, G. B. Emotional problems of demobilization. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 63-69.—As a result of his military training and experiences the soldier has acquired a system of values and standards that conflict seriously with his duties as a civilian. Much can be done to educate both groups so that this transition will be relatively smooth and free from conflict. A schematic outline of a short course of lectures and discussion has been prepared for the Canadian Army. It is included here to show the viewpoint of the army, citizen, spouse, and parent on such topics as philosophy, discipline, economics, vocations, education, health, etc. (see also 20: 2803).—*C. E. Henry.*

3640. Deutschberger, Paul. (Irene Kaufmann Settlement, Pittsburgh, Pa.) The structure of dominance. *Amer. J. Orthopsychiat.*, 1947, 17, 343-351.—Thirty-two natural groups of adolescent males residing in N.Y.C. were studied in regard to group structure and the personalities of their indigenous group leaders. In accepting submission to the leader, the individual members of anti-social gangs are relieved of a large portion of personal responsibility. The leader plays the role of the superego that has made an alliance with the instinctual tendencies. The leader, on the other hand, is usually rigid, tense, alert and suspicious. It is speculated that the leaders of dominance groups have personality structures resulting from failure of their psychosexual development. While the followers purchase, by a denial of the demands of external society, a relaxing in superego pressures and a relative freedom from guilt, the leader's anxiety increases and his conflicts are externalized and his hostilities projected.—*R. E. Perl.*

3641. Fraiberg, Selma H. (Consultation Bureau, Detroit, Mich.) Studies in group symptom formation. *Amer. J. Orthopsychiat.*, 1947, 17, 278-289.—A study of rape fantasy and a study of race riot are presented based on narrative group records, case histories on each child, group and individual interviews. In each case the group identifies with the central person not out of love or previous identification. The identification is superficial and transitory based on a common etiological factor which reactivates a basic conflict in each member of the group.—*R. E. Perl.*

3642. Harrison, Tom. (Mass-Observation, London, England.) The future of British sociology. *Int. J. Opin. Attitude Res.*, 1947, 1, 47-62.—As a reaction from traditions of subjective sociology, there has arisen in British sociology an overemphasis on statistical, quantitative methods. American field work has been far more abundant and fruitful than similar work by British sociologists. Furthermore, there have been too few long-term, pure research investigations rather than *ad hoc* service studies. British universities have neglected sociology; several, including Oxford and Cambridge, have no department at all. Especially neglected areas in British sociology have been (1) verbal behavior, other than responses to interviewers' questions, (2) observation of normal behavior, particularly non-verbal, (3) penetrative analysis of social institutions and normal set-ups, and (4) intensive study by all methods of basic human problems, such as the breakup of the family, fear of the future, decline in established ideologies, etc. Rather than extensive statistical apparatus, British sociology needs a body of principles, greater appreciation of scientific method, and a wide variety of research organizations. 24 references.—*N. L. Gage.*

3643. Link, Henry C. (Psychological Corp., New York.) Some milestones in public opinion research. *Int. J. Opin. Attitude Res.*, 1947, 1, 36-46.—The decade 1920-1930 saw the rise of commercial research on consumers' and employees' opinions and attitudes, and the adoption of standardized questionnaires, personal interviews, and large samples properly distributed. The next decade was marked by the development of the Psychological Barometer and of a rationale for determining the number of interviews necessary for a given accuracy; by the *Literary Digest's* failure and the corresponding validation of the Fortune, Gallup, and Crossley polls in the 1936 presidential election; by the publication of numerous journals and books devoted to opinion research; by the development of questionnaire pre-testing procedures; by research on question-wording, scaling, and depth interviewing as against short-answer questions. During the last ten years, opinion polls have been organized in nine other countries as affiliates of the American Institute of Public Opinion, and in Mexico; three university-affiliated polling organizations have been established; surveys have been extensively used by government agencies and the armed services; and polls of experts have been organized. 22 references.—*N. L. Gage.*

3644. Lippitt, Ronald, Bradford, Leland P., & Benne, Kenneth D. (Massachusetts Institute of Technology, Cambridge.) Sociodramatic clarification of leader and group roles as a starting point for effective group functioning. *Sociatry*, 1947, 1, 82-91.—A sociodrama was presented at the start of a two-week workshop to illustrate successful leader-delegate interaction. It made possible a quicker warming-up situation for all persons concerned, and helped equate ideas of participation. An edited

recording of the sociodrama is reproduced.—R. B. Ammons.

3645. Nissen, Ingjald. (U. Oslo, Norway.) *Psykopatenes Diktatur*. (Dictatorship of the psychopaths). (2nd rev. ed.) Oslo: Aschehoug, 1946. Pp. 255. N. Kr. 10.—Nissen's analysis of the psychology of German fascism affords the hypothesis that psychopathy is the ground of fascistic ideology. Its power-policy is a rationalization at large of the psychopathic aggression characterizing the Nazi-leaders. Profiting from his many years of experience as a psychotherapist of the Adlerian School, Nissen discusses the psychopathic behavior, described as a remarkably irrational struggle for gaining power in all life situations. In a social group, psychopaths will automatically endanger democracy. The nazistic attitude, with its tremendous aggressive force, its untrue propaganda, its policy of intrigue, etc. is formed as compensation for social insecurity. The affinity among the members of such a group is increased by its patriarchic structure. Analyzing historical and sociological trends in the German "Volk," the author finds the development of "men-groups" prevailing, with its ideology of masculinity and ascetism, potential and manifest homosexual tendencies and the truncation of the function of females except that of child-bearing.—F. Fluge.

3646. Wright, David G. *Anxiety in aerial combat*. *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 116-124.—All combat airmen suffer anxiety; the manner in which it is handled is largely dependent upon situational factors that are subject to a considerable degree of manipulation and control. It appears that group relationships are of major importance. Much stress without severe neurotic conflict may be endured in the presence of a common threat and common goal if action may be directed toward that goal, if each man is properly placed in this group and the success of the over all plan is made clearly apparent, and if good leadership, which includes due respect for each member of the group, is made consistently available.—C. E. Henry.

METHODS AND MEASUREMENTS

3647. Blanchard, B. Everard. (Elmhurst Coll., Elmhurst, Ill.) *Social acceptance studies of pupils in public schools*. *J. educ. Res.*, 1947, 40, 503-512.—A random selection of 18 studies of social acceptance published from 1902 through 1946 is briefly reviewed. Most of the studies are devoted to pupils of elementary school age and use the questionnaire method. The matters most frequently investigated are: work groups, play groups, social groups, and the influence of age and intelligence upon social acceptance. 18-item bibliography.—M. Murphy.

3648. Cahalan, Don, Tamulonis, Valerie, & Verner, Helen W. (U. Denver, Colo.). *Interviewer bias involved in certain types of opinion survey questions*. *Int. J. Opin. Attitude Res.*, 1947, 1, 63-77.—To relate degree of interviewer bias to types of questions, the authors used results from

51 questions asked by from 55 to 121 National Opinion Research Center interviewers, whose selection and training are described. The questions, chosen for suitability to this investigation, were classified into 12 types of structures. Cross-tabulations of interviewer's as against their respondents' opinions were tested with chi square. Significant bias was thus revealed in about 75% of the questions. Similarly, the types of questions were grouped according to the following kinds of susceptibility to bias: marked, suspected, little, probably little, and uncertain. The importance of the interviewer bias was slight, however, when estimated by comparing actual distributions of respondents' opinions with hypothetical distributions derived by assuming equal numbers of interviews conducted by interviewers with varying opinions on the question. Only in extreme cases did interviewer bias change percentages by 5 or 6 points. 8 recommendations are listed and discussed for dealing with the problem of interviewer bias.—N. L. Gage.

3649. Guttman, Louis. (Cornell U., Ithaca, N. Y.) *Suggestions for further research in scale and intensity analysis of attitudes and opinions*. *Int. J. Opin. Attitude Res.*, 1947, 1, 30-35.—Three further problems have arisen out of the development of techniques for scale analysis and for the identification of invariant zero-points through intensity analysis. These are, how to agree on the definition of a universe of content, how to identify and interpret further functions that are in the scale besides the intensity function, and how to explore psychological laws that might result from zero-point analysis. If 2 samples of questions form a scale together, there is no problem; but if one sample scales and the other does not, how can one tell whether they are samples of the same universe? This problem may seldom occur in practice since questionnaires constructed independently for the same purpose usually have similar manifest content. Secondly, since there are as many principal components as there are items in a scale, what psychological meanings can be assigned to those beyond the second, when their functions of the scale rank order have 2, 3 . . . n bends, n being the number of items? Finally, how can the zero-point and other aspects of internal metric be used in the prediction of external variables?—N. L. Gage.

3650. Keller, J. D. *Growth curves of nations*. *Hum. Biol.*, 1946, 19, 204-220.—S-shaped curves well known in growth studies of plants and animals, are also found in "other kinds of growth"—business enterprises, track mileage in railway expansion, and empire development. The growth curves of Ancient Rome and the United States are developed upon arbitrarily selected ("power") data, including population, territorial expansion, Army size, and economic wealth statistics. Compared to Ancient Rome the United States may be expected to "reach the zenith of its power about A.D. 2200."—L. A. Pennington.

3651. Kroeger, Henry J. (The Iowa Poll, Des Moines, Ia.) *The usefulness of the multiple-choice*

question. *Int. J. Opin. Attitude Res.*, 1947, 1, 102-105.—Illustrations of questions and results from the Iowa Poll are given to show how several questions on the same topic and several alternatives within a question facilitate the interpretation of poll results.—N. L. Gage.

3652. Robinson, R. A. Use of the panel in opinion and attitude research. *Int. J. Opin. Attitude Res.*, 1947, 1, 83-86.—The panel of reader-reporters used by the *Woman's Home Companion* is described. Selected by written invitation, each of the 2000 members furnishes much pertinent information concerning herself and her family. Consumer preferences, habits and opinions on national problems are ascertained by mailed questionnaires. The continuing panel permits referring answers to previous attitudes. Personal data are re-checked annually to keep pace with changes in living conditions. To reduce bias resulting from changes in the members due to participating in the panel, such as increasing articulateness, the membership is rotated so that each year one-third is completely renewed. Examples and discussions of panel findings are given.—N. L. Gage.

3653. Rose, Arnold M. (Bennington Coll. Bennington, Vt.) Interviewing to test for validity and reliability. *Int. J. Opin. Attitude Res.*, 1947, 1, 100-101.—Suggestions are made for improving the pretest interview intended to increase the validity and reliability of opinion poll questions.—N. L. Gage.

3654. Smith, M. Brewster, (Harvard U., Cambridge, Mass.) Bruner, Jerome S., & White, Robert W. A group research project on the dynamics and measurement of opinion. *Int. J. Opin. Attitude Res.*, 1947, 1, 78-82.—To investigate the dynamics of opinion in normal adults and to develop an Opinion Diagnostic Interview, the authors chose opinions about Russia as topic and 10 adult men as subjects. Data from about 30 hours of testing and interviewing, submitted to a 7-member Diagnostic Council, are intended to furnish ideas for construction of an Opinion Diagnostic Interview procedure and for a conceptualization of the dynamics of opinion. A wide variety of standardized and experimental tests, tasks and situations, are to be administered. The preliminary conceptualization already formulated covers the dimensions, structure and organization, time perspective, action consequences, and functions in personal and social adjustment, of opinion.—N. L. Gage.

CULTURES AND CULTURAL RELATIONS

3655. Bateson, Gregory. Sex and culture. *Ann. N. Y. Acad. Sci.*, 1947, 47, 647-660.—The theoretical implications of the relationship between "sex" and culture are discussed. The basic types of objective data in cultural anthropology are examined. The significance of learning in human sexual behavior is considered.—S. Ross.

3656. Boder, David P. (Illinois Institute of Technology, Chicago.) The displaced people of Europe; preliminary notes on a psychological and anthropological study. *Illinois Tech. Engr.*, 1947, 12, 18-21; 31-34.—The author briefly describes his research program of securing wire-recorded interviews with displaced persons in Europe. In the present preliminary report interpretative notes on the experiences of concentration camp victims and other displaced persons are organized from the interviews with approximately 70 individuals representing less than half of the 200 spools of recordings secured.—C. M. Louttit.

3657. Bonaparte, Marie. *Mythes de guerre*. (Myths of war.) London: Imago, 1946. Pp. 180. 9s.—A large collection of war myths are presented and analyzed. They are organized into sections on: (1) the corpse in the auto, (2) the amount of money devined, (3) wine or food affecting sexual potency, (4) the impotent or friendly enemy, (5) combat, (6) Albion menaced, (7) the satanical Jew.—R. B. Ammons.

3658. Foreman, Paul B. (Oklahoma A. & M. Coll., Stillwater.) & Hill, Mozell C. (Langston U., Okla.) The Negro in the United States: a bibliography. *Bull. Okla. A & M. Coll.*, 1947, 44, No. 5. Pp. 24.—This bibliography includes selected references which are considered as the minimal requirements for a college library in connection with courses in race sociology and relations. Parts 1, books (6 p.) and 2, monographs and pamphlets (4 p.) are arranged by author only; part 3, primary periodical references (9 p.) is arranged under 9 classes.—C. M. Louttit.

3659. Gerstein, Reva. (U. Toronto, Canada.) Probing Canadian prejudices: a preliminary objective survey. *J. Psychol.*, 1947, 23, 151-159.—The Canadian Youth Commission in June 1944 collected data concerning youth's attitudes towards minority groups. In December 1945, a Gallup Poll was conducted investigating attitudes toward discrimination in places of entertainment. Data gathered by both polls are compared and consistent attitudinal trends are sought with a view to exposing group hostility expression and to seeking out those areas most needful of educational techniques to control negative prejudicial growth.—M. Mercer.

3660. Honigmann, J. J. Witch-fear in post-contact Kaska society. *Amer. Anthropol.*, 1947, 49, 222-243.—The Kaska Indians of Northern British Columbia have had a series of intratribal murders characterized by suspicions of witchcraft and a specific form of torture inflicted by the members of the victim's family. This behavior is new and has appeared only since recent white contact. The concept of witch has been borrowed from neighboring tribes, and the shaman, formerly benevolent, now has an evil counterpart in a witch. This new trait is regarded as due to an increase in situational anxiety due to white contact. In Kaska child training there is a low threshold of basic anxiety.

The new trait is the result of displacement of anxiety from the situation to some victim.—L. M. Hanks, Jr.

3661. Jaffe, A. J. (U. S. Bureau of Census, Washington.) Notes on the rate of growth of the Chinese population. *Hum. Biol.*, 1947, 19, 1-11.—With an estimated population of 450 millions Chinese officials are emphasizing the need for a "differential rate of increase" for the best interests of the country. Factors influencing the population trends described are analyzed.—L. A. Pennington.

3662. Kaufman, S. Harvard. (State Dept. Health Guidance Clinic, Seattle, Wash.) The problem of human difference and prejudice. *Amer. J. Orthopsychiat.*, 1947, 17, 352-358.—Emotional growth is incomplete in our culture. Human difference has become a liability instead of a positive factor in life experiences. Because of unclearly defined roles in our culture, all groups attempt to identify with something to give them status. The need to be different is paramount, yet to be one of a homogeneous group where it is permitted to be different is the goal of emotional and social security. In the discussion Saul Rosenzweig emphasizes the fact that the reform that militantly increases insecurity by attempting to force the acceptance of differences is doomed to failure. The goal cannot be achieved by methods which increase the insecurity that lies at the root of the problem.—R. E. Perl.

3663. Mead, Margaret. (Amer. Museum Nat. Hist., New York.) Age patterning in personality development. *Amer. J. Orthopsychiat.*, 1947, 17, 231-240.—Mead draws upon her Balinese and other field work to furnish a basis for some cross-cultural comment upon ways of patterning the behavior exercised toward the growing child. The hypothesis is presented that the amount of symbolic richness in a culture is associated with age patterning; in those cultures in which the child passes directly from babyhood into an undifferentiated children's group, development lacks complexity of symbolic preoccupation. Practical implications are drawn for our child training.—R. E. Perl.

3664. Mead, M. On the implications for anthropology of the Gesell-Ilg approach to maturation. *Amer. Anthropol.*, 1947, 49, 69-77.—Three concepts in particular have cross-cultural relevance in accounting for varying personality development in different cultures. The notion of a biological rhythm of growth is important in that it may be compared with the cultural expectations of growth; then in accordance with whether a culture neglects the maturing trait, considers it an individual matter, or imposes its own rhythm, differing personality resultants may be anticipated. Growth periods with their consolidation or expansion may be made alternately easy or difficult depending on whether precocity or slow development is culturally fostered. If individual rhythms of development could be thoroughly described, it might be possible to account for apparent selection of temperamental types by a given culture on the assumption that a culture fosters

a given rhythm of growth and thus acts to select a particular temperament.—L. M. Hanks, Jr.

3665. Merrill, Pierce Kelton. The social and economic status of the Choctaw Indians. In *University of Oklahoma, Abstracts of theses . . . 1940*. Norman, 1947. Pp. 52-53. (*Univ. Okla. Bull.*, 1947, No. 970.)—Abstract of M.A. thesis.

3666. O'Brien, T. P. The methods and aims of a Race Relations Institute. *E. Afr. med. J.*, 1946, 23, 361-384.—Part I examines the concept of "race" from the standpoints of history, biology, psychology and its social, political and economic aspects. "Race" is a convenient abstraction, a "solving word" used by self-interested persons and groups in order to excuse and perpetuate inequalities in the social structure. Part II consists of a short outline of some of the methods of social science which should be applied in East Africa, not only to solve problems of race relations, but also to increase social, cultural and economic efficiency and prosperity throughout the entire community.—F. C. Sumner.

3667. Remmers, H. H., (Purdue U., Lafayette, Ind.) & Gage, N. L. Patterns of attitudes toward minorities among high school youth in the United States Middlewest. *Int. J. Opin. Attitude Res.*, 1947, 1, 106-109.—Overall results of the thirteenth Purdue Opinion Poll for Young People are presented and discussed. The responses of 7000 Northern high school students to 15 questions dealing with Negroes, Japanese, and minorities in general, form the basis for conclusions concerning the operation of the "American Dilemma."—N. L. Gage.

3668. Russell, David H., & Robertson, Isabella V. Influencing attitudes toward minority groups in a junior high school. *Sch. Rev.*, 1947, 55, 205-213.—A group of 737 California students in Grades VII through IX were subjected to planned assembly programs and the reading and discussion of printed materials designed to induce more favorable intercultural relations. In the study emphasis was placed upon attitudes toward Americans of European origin and toward Negroes. Measurements were obtained by means of the Grice Scale in October 1945, with a retest on an alternate form of this test in the following January. Over 80% of the total group showed favorable attitudes toward European-Americans on both tests, although the Negro students both initially and finally were less favorably disposed toward this group than were the white pupils. Attitude toward Negroes was favorable in the case of 41.2% of the students initially, and increased to 48.4% on the retest. Degree of shift in attitude varied with the individual teacher, and younger pupils appeared more responsive than older ones. As a group Negroes displayed more favorable attitudes toward white students than the latter showed in relation to Negroes, but the attitudes of the Negroes were relatively unchanged by the experimental program.—R. C. Strassburger.

3669. Trescott, Paul H. (Philadelphia Bulletin Poll, Philadelphia, Pa.) The broad gap between

rural and urban opinion. *Int. J. Opin. Attitude Res.*, 1947, 1, 87-92.—Opinion research should be concerned not only with what people think but also with why they think as they do and with how their thinking can be improved. The urban-rural distinction is important but difficult to make. Urban people have attitudes toward work, entertainment, honesty, and self-reliance different than those of rural people. Ignorance and apathy concerning rural problems and ways of living is widespread among city dwellers. Possible corrective measures through polling and journalism are considered.—N. L. Gage.

SOCIAL INSTITUTIONS

3670. Child Study Association of America. Bibliography Committee. (221 West 57th St., New York.) The child, the family, the community; a classified booklist. New York: Child Study Association, 1947. Pp. 93. \$.75.—The titles included in this annotated list have been selected from the literature of the past 20 years to meet the needs of parents, teachers and other professional workers for material concerned with the family in its internal relations and its relations to the community and education. The titles are arranged in a subject classification with title and author indexes and a list of publishers.—C. M. Louttit.

3671. Cohen, John. (U. London, England.) Human nature, war, and society. London: Watts, 1946. Pp. x + 193. 2s. 6d. (The Thinker's Library, No. 112.)—"War-like behavior is the result of psychological causes operating under specific social and economic conditions, and in the total situation, from the point of view of control, the conditions are of primary, and the causes of secondary, importance." Attempts to explain warring behavior in terms of instincts or any "universal" behavior pattern supposedly common to the animal kingdom are rejected. The frustration-aggression hypothesis is held to apply only to individual behavior and scepticism of the original version of this hypothesis is advanced. Fundamentally, war is between social entities such as states, nations, and tribes and as such cannot be considered from a biological or strictly psychological point of view. Aggression is culturally patterned and it is necessary to change these patterns to eliminate war. The legal and political science point of view that war can be outlawed by agreements to scrap armaments and by treaties is rejected because arms were not found by man but rather developed by him to achieve certain ends and so long as these ends remain war will occur. Thus as social conditions change new adjustments to prevent war must be made. 162-item bibliography.—R. A. Littman.

3672. de Grazia, Sebastian. (U. Chicago, Ill.) Status as a political motive. *J. liberal Religion*, 1947, 8, 91-101.—A philosophical discussion of status which the author defines as "the favorable estimations held by members of a community of the ways persons spend their time." It is pointed out

that, "the status system . . . is an ideology, a multitude of beliefs or evaluations concerning activities that contribute to the common good." Discussion on the mode of development of status and the status system followed by the author's concepts of how a primary status system is almost invariably fulfilled within the political sphere. The similarity in the status system of religion in fulfilling these criteria is indicated but, "political and religious status systems seldom have challenged the validity of one another's claims to providing for the commonwealth in the respective spheres of the here-and-now and the hereafter." Economic status systems, according to the author, fail to successfully compete with either political or religious systems in this area.—M. A. Seidenfeld.

3673. Schür, Hans. Religion und Seele in der Psychologie C. G. Jungs. (Religion and mind in the psychology of C. G. Jung.) Zurich: Rascher, 1946. Pp. 273.—It was felt that Jung's own writings are not intellectually available to the average reader. With this in mind, a careful analysis of his work has been made. Sections of the book deal with: (1) the basic concepts of Jung's psychology, (2) the psychic bases for religion, (3) religion as mental function, (4) man and religion, (5) Jung's importance to contemporary religion.—R. B. Ammons.

SOCIAL ACTION

3674. Allport, Gordon W. Guide lines for research in international cooperation. *J. soc. Issues*, 1947, 3, No. 1, 21-37.—Since knowledge implements belief and mankind has similar basic moral goals, an important question of how to achieve a policy of international cooperation is answered by outlining a series of areas for investigation by social science. These are: historical survey of a trend toward larger units in collective security, determining the conditions for democratic participation of whole peoples, assaying the effects of insecurity, investigating international conference procedures, educating the young for broad loyalties, seeking the common attributes of human nature, assessing current opinion on crucial issues, studying the effects of group and racial condescension, and seeking satisfactory symbols for international cooperation.—L. M. Hanks, Jr.

3675. Bruner, Jerome S. (Harvard U., Cambridge, Mass.) International research on social issues: a world survey. *J. soc. Issues*, 1947, 3, No. 1, 38-53.—Replies to a letter probing sentiments for an international organization of social scientists are reviewed. Sentiment favored cooperation on the grounds of local needs for assistance and information, preventing duplication of effort, and avoiding isolation. The areas indicated for research are: national character, requisites for harmonious and democratic group living, causes of inter-group conflict, growth of international mindedness, effectiveness of propaganda and communication, problems arising from industrialization, and improving methodological tools. No agreement on mode of

realizing international cooperation was forthcoming.—*L. M. Hanks, Jr.*

3676. Hansen, Bert. (*U. Montana, Missoula.*) Sociodrama in a small-community therapy-program. *Sociatry*, 1947, 1, 92-96.—Rehearsed sociodrama was utilized as a technique for small-community therapy in three Montana towns. Pressing and important community problems were written and acted out by members of the community. These productions are to be presented to the whole community, and at least in one instance have led to interest in spontaneous psychodrama.—*R. B. Ammons.*

3677. Lasswell, Harold D., (*Yale U., New Haven, Conn.*) & Goldsen, Joseph M. Public attention, opinion and action. *Int. J. Opin. Attitude Res.*, 1947, 1, 3-11.—To further research on the attention process, the authors propose a speculative model of world politics. In such a completely politicized arena, all states are internally united, their members agree in striving to maximize the power of their own state, all members of states share the expectation of violence and are perfectly informed about all that affects the power position of their state. Six hypotheses for research are formulated from this speculative model. Contradictions of these hypotheses can be explained by systematically gathered data and can be used to formulate more valid model-postulates. The addition of *ad hoc* factors and sub-postulates to the speculative model brings it closer to specific circumstances and leads to further hypotheses. Variations in each of the postulates of the model lead to speculative constructs that approximate actual historical situations. In this way scientific work on attention, opinion, and politics can bring together detailed political data and generalized laws of interaction.—*N. L. Gage.*

3678. Lee, Alfred McClung. (*Wayne U., Detroit, Mich.*) Social determinants of public opinions. *Int. J. Opin. Attitude Res.*, 1947, 1, 12-29.—The opposed propagandas of "free enterprise" and "collectivism" are deeply rooted in common attitudes and sentiments. The culture, of which these ideas are a part, is the immediate aggregate of social determinants of public opinions in any group, class or caste. The contradictions in, say, religious ideas among different groups are usually repressed by individuals with many group-memberships. Four levels of social organization (societal, group, personal, and self) are identified to account for these contradictions. The corresponding patterns or traits at these levels are conventions, folkways, practices and attitudes. The central patterns, similarly, are morals, mores, and sentiments. The role types and institutional functions at the 4 levels are also described. These levels are not discrete categories but rather are in changing relationships to fundamentally noncategorizable human behavior. These theories have implications for the interpretation of poll surveys in terms of types of rapport; polls conducted in terms of stereotypes may be inadequate for purposes other than predicting the outcome of elections.—*N. L. Gage.*

3679. Lewin, Herbert S., & Schwerin, Kurt. Wartime German youth books were used for indoctrination. *Libr. J.*, 1947, 72, 1008-1011.—Reading, a significant part of the Hitler Youth Movement, was controlled through the availability of reading material. A tabulation of boys' stories in immediately pre-war issues of *Boys Life* and the comparable *Jungen-Eure Welt* indicates that the German stories were laid in wider spread geographic areas, the heroes were adult, and the story plots had a social meaning. The function of reading and the part to be played by libraries in democratic indoctrination are pointed out.—*C. M. Louttit.*

3680. Linebarger, Paul Myron Anthony. (*School of Advanced International Relations, Washington, D. C.*) Psychological warfare in World War Two. *Infantry J.*, 1947, 60, No. 5, 30-39; No. 6, 41-46.—The propaganda accomplishments by the Germans up until the outbreak of World War II are reviewed. Then the British-German radio war is analyzed, and the techniques employed are discussed in the light of the problems and advantages peculiar to either side. Japanese, Soviet and Chinese experience is touched upon briefly. The bulk of the article treats the history of American operations, tracing the administrative developments of the various government agencies for psychological warfare and summarizing the lessons from the American experience. "In concluding the historical summary of psychological warfare, it is interesting to look at three major points which emerge plainly": . . . (1) "psychological warfare is a function of command" . . . (2) "atrocities propaganda begets atrocities" . . . (3) "America does not normally produce psychological personnel in peacetime, and if such personnel are to be needed again, they will have to be trained especially and in advance."—*N. R. Bartlett.*

3681. Lippitt, Ronald. The challenge of a United Nations. *J. soc. Issues*, 1947, 3, No. 1, 2-9.—The article is a foreword to the issue. Not only is research in social science of crucial importance to the operation of international bodies, but the refashioning of social science to encompass these demands is a challenge to scientists. These problems are both of a long-run kind to get a better concept of man and society and of a short range kind as well, to meet the specific needs for information that international programs demand. Finally the challenge is also to professional schools to recognize the problems and prepare personnel to cope with them.—*L. M. Hanks, Jr.*

3682. Martin, P. W. Unesco and psychology. *J. soc. Issues*, 1947, 3, No. 1, 10-20.—Within UNESCO the sections with bearing on psychology are mass media, education, and social science. Under the latter authority lie projects of special interest to psychologists. These include: studies of nationalism, population problems with particular reference to culture conflict, the social effects of technological development, formation of centers for the study of home and community planning, and formulation of plans for international study centers. Certain

projects of direct psychological concern include a study of Nazi psychology and psychological factors in international relations, which along with others were not approved or were deferred. Psychology has not yet acquired respect as a science among scientists due partly to professional rivalry with other disciplines, partly to the fact that psychology has not yet a widely recognized method and specified field, and partly to the lack of unanimity of voices in psychology itself.—*L. M. Hanks, Jr.*

3683. Miller, George A. (*Harvard U., Cambridge, Mass.*) Population, distance, and the circulation of information. *Amer. J. Psychol.*, 1947, 60, 276-284.—Zipf's " P_1P_2/D hypothesis" (see 21: 218) to the effect that the amount of information exchanged between two groups is directly related to the size of the groups and inversely related to their separation in space, is subjected to more rigorous analysis and formulation. The analysis is primarily directed at the original assumptions underlying the hypothesis. The following topics are analyzed in turn: population and the exchange of messages; distance and the exchange of messages; population and distance (see 21: 3685).—*S. C. Ericksen.*

3684. Murphy, Gardner. (*Coll. City of New York.*) Cartwright, Dorwin, & Bruner, Jerome S. Resources for world-wide research in human sciences. *J. soc. Issues*, 1947, 3, No. 1, 54-65.—How can the research potential of all nations be coordinated? To date parallel research in various countries has produced inefficient expenditure of effort and the problems have been varyingly framed or treated with methodological differences. Actual cooperative research is rare between international groups of social scientists. Though an international laboratory under the aegis of the United Nations has been proposed, serious problems arise concerning its functions in relation to national laboratories. Subsidization of national laboratories to do particular research for an international body has the disadvantage of resting on segmentalized efforts rather than coordinated international efforts.—*L. M. Hanks, Jr.*

3685. Zipf, George Kingsley. (*Harvard U., Cambridge, Mass.*) On Dr. Miller's contribution to the P_1P_2/D hypothesis. *Amer. J. Psychol.*, 1947, 60, 284-287.—In reply, (see 21: 3683) alternate assumptions from which the P_1P_2/D hypothesis may be derived are outlined. The probability of human events (valuable news-items) in a population P is proportional to P , as is the probability of persons in the population for whom the event is a news-item. The probability of interest in the item in other populations is inversely proportional to distance D . It therefore appears that the probability of events in community P_1 , which are news-items in community P_2 , and vice versa, is P_1P_2/D . Normative survey data is presented as verification of the theory. It is found that the size of a newspaper's circulation is roughly in proportion to its city's population, and that the rate of circulation of all papers to surrounding cities is approximately constant.—*S. C. Ericksen.*

CRIME AND DELINQUENCY

3686. Bernaldo de Quirós, Conancio. La asociación en el delito. (Criminal associations.) *Criminalia, Méx.*, 1946, 12, 300-316.—Introduction and the first 2 lectures of a monographic course given in the Mexican Academy of Criminology. Everything defined as crime by the various codifications is considered, however, emphasis is placed upon criminal personalities. After perusing the European literature on the subject the author arrives at the following classification of criminal associations: the criminal couple, the gang, the criminal sect (undefined in number and better organized than the former), the cooperative crime, the criminal mass, and dangerous classes. The criminal couple may be homo- or hetero-sexual with either partner as leader; loneliness and pleasure serve as incentives.—*J. H. Bunzel.*

3687. Blasco y Fernández de Moreda, Francisco. La concepción psicopatológica de la criminalidad. (The psychopathological concept of criminality.) *Criminalia, Méx.*, 1946, 12, 539-548.—An historical classification of personality types, including sketches of the cyclothymic, the overemotional, the paranoic, the mythomaniac (pathological liar) and the religious personality. The author finds that psychopathological delinquents do not offer peculiar characteristics differing from psychopathological patients in general. He denies the existence of a unified type—a psychopathic criminal. One can only affirm that one encounters psychopaths among criminals quite frequently. Only in perturbing social circumstances and in a grave moral crisis does the psychologically normal person become a criminal.—*J. H. Bunzel.*

3688. Boggess, Mabel Erroll. Sixty juvenile delinquents in Cleveland County, Oklahoma. In *University of Oklahoma, Abstracts of theses . . . 1940*. Norman, 1947. P. 134. (*Univ. Okla. Bull.*, 1947, No. 970.)—Abstract of M. Soc. Work thesis.

3689. Brasol, Boris. La epilepsia y la responsabilidad criminal. (Epilepsy and criminal responsibility.) *Criminalia, Méx.*, 1946, 12, 433-437.—Inability to grasp the significance of an act at the moment of committing it; inability to foresee its consequences; various states of unconsciousness; mental defectiveness as a result of physical defects, these are the legally defined conditions which exclude responsibility. Thus, specifically in the case of epileptics it seems that at least one of the conditions is given; namely, a momentary unconsciousness in grand and petit mal, a disintegration of the volitive mechanism; and other characteristics mentioned in the brief medical and historical survey at the beginning of the article.—*J. H. Bunzel.*

3690. Christiansen, Karol O. (*U. Copenhagen, Denmark.*) Theft with atypical motive. *Acta psychiat., Kbh.*, 1946, 21, 195-210.—Various examples of theft in which the motives were not economic gain are described and the psychodynamics discussed. It is pointed out that the irrational psychic mechanisms operating in these atypical

crimes probably play an important role in many "normal" thefts, i.e., for the ostensible purpose of economic gain.—A. L. Benton.

3691. Diggs, Mary Huff. A comparative study of delinquent behavior manifestations in 100 delinquent and 100 non-delinquent Negro boys. *Microfilm Abstr.*, 1946, 7, 104-106.—Abstract of Ph.D. thesis, 1945, Bryn Mawr Coll. Microfilm of complete thesis 141 pages, \$1.76, University Microfilms, Ann Arbor, Mich. Publ. No. 814.

3692. Guerra, L. A. *Psicología y reeducación del menor delincuente.* (Psychology and reeducation of juvenile delinquents.) *Rev. Neuro-Psiquiat.*, Lima, 1946, 9, 396-399.—Abstract.

3693. Guerra, Luis A., & Jinés, Bernardino H. *Aporte al estudio del menor en estado peligroso en Lima.* (An approach to the study of the juvenile delinquent in Lima.) *Rev. Neuro-Psiquiat.*, Lima, 1946, 9, 242-278.—Juvenile delinquency as studied in a group of Peruvian cases from three state institutions is seen as a product of both sociological and individual factors. Home influences, and non-home influences (school and street) constitute the social factors. Intelligence (IQ), personality (extroversion predominantly evidenced according to the Rorschach test), worldview (antisocial and destructive), and education (such as does not counteract tendency to juvenile delinquency) constitute the individual factors.—F. C. Sumner.

3694. Hernández Quiros, Armando. *La perversión sexual, su proyección al área de las ciencias penales.* (Sexual perversions, as seen by criminology.) *Criminalia*, Méx., 1946, 12, 505-538.—This article starts with definitions and classifications of sexual perversions, aberrations, and other abnormal sexual activities. There is a discussion of the importance of endocrinological studies for both sexual perversions and their treatment by the law. State and society have to distinguish whether (a) a crime is committed, if not, enlightenment by the church and medicine as well as through education should prevent delinquency; (b) if a crime has been committed punishment should not deteriorate the endocrine functions of the pervert delinquent; (c) the time of punishment should be used to cure, rehabilitate, and reestablish the delinquent and to help avoid relapse.—J. H. Bunzel.

3695. Lagrone, Cyrus W. (*U. Southern California, Los Angeles.*) *Developmental factors in relation to recidivism and non-recidivism among military delinquents.* *Amer. J. Orthopsychiat.*, 1947, 17, 241-253.—This study aims to determine the differences in backgrounds between restored Army delinquents who became recidivists and those whose subsequent adjustment to the Army was successful. Two groups of 100 each representing opposite extremes with respect to subsequent adjustment were selected for study. 23 conclusions are drawn including statements to the effect that non-recidivists tend to be slightly older, recidivism is more frequent among men with longer sentences, and recidivism is defi-

nately greater in cases where the offense committed is of a strictly military character.—R. E. Perl.

3696. Landaburu, Laureano. *El delito como estructura.* (Gestalt-theory of the crime.) *Criminalia*, Méx., 1946, 12, 334-376.—This study attempts to penetrate criminology with psychological insights recently won. It is unfinished and will be continued in a later issue. So far it gives an analysis of crime in the light European, mostly German, psycho-philosophy. It describes Gestalt theories and shows their possibilities in criminology. It borders on existentialism considering crime as living and existing human life and enters value-theory with a discussion of insight and understanding as spiritual phenomena. The study takes issue with the dominant theory according to which crime can be subdivided in various stages; it attempts to replace it with a Gestalt-theory and verify this empirically.—J. H. Bunzel.

3697. Lippuner, O. *Die Schrift des Mörders Irniger.* (The writing of the murderer Irniger.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1945, No. 6, 66-72.—A detailed analysis is presented of the handwriting of a "famous" murderer.—R. B. Ammons.

3698. Mannheim, Herman. *Criminal justice and social reconstruction.* London: Kegan Paul, Trench, Trubner and Co., Ltd., 1946. Pp. x + 290. 15s.—This is an examination of the incompatibility of much of the criminal law of Great Britain with present-day attitudes to social justice. Mannheim picks out some of the main anachronisms in the laws dealing with homicide, suicide and euthanasia; sterilization, birth control and abortion; sexual offences; theft and fraud of various kinds; and strikes and absenteeism. He contrasts British law with regard to these offences with the law of various Western European countries and of the U.S.A. His suggestions as to the reform of British law provide a blue-print for discussion and consideration. He suggests that an increase of administrative and delegated legislation would overcome many of the shortcomings and inconsistencies of the present penal code.—M. D. Vernon.

3699. Rutishauser, E. *Psychologie der Verwahrlosung.* (Psychology of social behavior problems.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1944, No. 5. Pp. 86.—Pre-delinquent anti-social behavior is primarily a social phenomenon, based on giving up attempts to adhere to societal standards. "Bad company" makes this decision easier. Persons of borderline sociality are attracted by the destructive side of revolutionary political parties. Anomalies of character and the normal course of puberty can be predisposing factors. 105-item bibliography.—R. B. Ammons.

3700. Snow, Herman B. *Psychiatric procedure in the Rehabilitation Center, Second Service Command.* *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 258-270.—The function of the Rehabilitation Center is to restore as many general prisoners to the military service as possible. All prisoners are screened and

separated into two groups: the non-restorables (who undergo further confinement), and the potentially restorable. These latter men are given personal interviews and some group therapy to aid them in gaining insight into their behavior. Tables show the psychiatric classification of 1188 discharged prisoners, 56.6% of whom were restored to duty. There is a further statistical work-up of some 1900 prisoners, showing education, marital status, and types and numbers of offenses. "It is definitely considered that the establishment of Rehabilitation Centers has been a great step in the direction of social correction and adjustment of individuals who might otherwise have spent long periods of incarceration in either civilian or military prisons."—C. E. Henry.

3701. Uribe Cualla, Guillermo. *Constitución psicopática perversa y paranoide*. (A perverse and paranoid psychopathic personality.) *Rev. Med. legal Colombia*, 1946, 8, 60-68.—Case of a 24 year old man accused of robbery. The history indicates a perverse psychopathic constitution with paranoid traits.—F. C. Sumner.

3702. von Hentig, Hans. (*U. Kansas City, Mo.*) *Crime: causes and conditions*. New York: McGraw-Hill, 1947. Pp. xii + 379. \$3.75.—This textbook on criminology is the first volume of a series of 3 which will eventually be published by the author. The first section is an introduction to criminology as a science. One chapter in this section analyzes in detail the reliability and validity of police, court, prison, and other data as sources of crime statistics. The rest of the book deals almost exclusively with the physiological (sex, age, and race) and social determinants of crime. Considerable attention is given to the impact of the war and post-war period on social and economic factors relating to criminality. This book stresses the social forces producing crime and is an introduction to criminology from the sociologist's standpoint.—A. Chapanis.

ART AND AESTHETICS

3703. Brun, Gudrun, & Brun, Georg C. A psychological treatise on Hans Andersen's fairy tale "Thumbelina." *Acta psychiat., Kbh.*, 1946, 21, 141-149.—The fairy tale is analyzed and it is concluded that "Thumbelina seems not only to be a soulful poetical work on the development of man from babyhood to adult age, but also to contain the germ of a new psychological classification of types."—A. L. Benton.

3704. Lawshe, C. H., Jr., & Wood, Wendell F. (*Purdue U., Lafayette, Ind.*) *Membership in musical organizations as a criterion of talent*. *Amer. J. Psychol.*, 1947, 60, 250-253.—The pitch test of the Seashore Measures was given to 2018 elementary psychology students and the remaining 5 tests were rotated in such a way that the number taking each test was approximately equal. *N* for the Choral Group ranged from 74 to 205; for the Instrumental Group from 25 to 66. The Choral Group made statistically significantly (1% level) higher median scores on the pitch, rhythm, and tonal memory

tests than the Total Group. The Instrumental Group was equally superior on the pitch and tonal memory tests. In general the Instrumental Group made better scores than the Choral Group. "On the assumption that membership in musical organization is a valid criterion of musical talent, our results present new evidence for the validity of Seashore's Measures of Musical Talents."—S. C. Ericksen.

[See also abstracts 3335, 3437, 3489, 3492, 3495, 3496, 3499, 3522, 3583, 3600, 3738, 3748, 3773.]

PERSONNEL PSYCHOLOGY

3705. Abt, Lawrence Edwin. (*New York U.*) *The efficiency of the Group Rorschach Test in the psychiatric screening of Marine Corps recruits*. *J. Psychol.*, 1947, 23, 205-217.—The Group Rorschach Test was used in conjunction with a mental test and a pencil and paper personality inventory in the psychiatric screening of 1000 Marine Corps recruits. The Group Rorschach Test differentiates between recruits who adjust and those who fail to adjust to recruit training in the Marine Corps. The group method identifies neuropsychiatric misfits missed by a typical pencil and paper personality inventory. A simple, economical inspection evaluation of each group protocol is adequate for screening purposes. The experiment shows that there is a high positive relationship between inspection evaluated group records and Drill Instructor performance ratings of the same subjects. There is also a high positive relationship between inspection evaluated group protocols and the personal and social history factors of the same subjects. A test battery consisting of the Group Rorschach Test, a psychometric test, and a paper and pencil personality inventory led to the identification of 86% of the neuropsychiatrically unfit.—M. Mercer.

3706. Burlingame, C. Charles. (*The Institute of Living, Hartford, Conn.*) *Psychosomatic elements—when the foreman is a pain in the neck*. *Conn. med. J.*, 1947, 11, 179-182.—A generation ago stress was placed on selection of the men best fitted for the job in the interest of industrial efficiency. Today it is being recognized that the fittest men for the job may be made to function inefficiently by a foreman who makes for emotional tension in the workers. Unsatisfactory attitudes in the supervisors produce in the worker one of three reactions: (1) he will throw up the job; (2) he will project his discontent in an overt dissatisfaction and criticism of the place and foreman; (3) he will get sick. While all these repercussions tend to lower industrial efficiency, it is the third which is of primary concern in this paper. The illness produced by emotional tension, or anxiety runs the gamut of psychosomatic disorders. The remedy for this cause of industrial inefficiency is in reeducating foremen (1) to be teachers to the men; (2) to be expert in understanding emotional drives and the will to do.—F. C. Sumner.

3707. Carter, Gerald. (U. Illinois, Urbana.) *Practice in personnel psychology.* *Amer. Psychologist*, 1947, 2, 148.—A training program for students in industrial psychology at the University of Illinois which involves projects for solving problems in the relations between the University and its non-academic employees is described.—N. R. Bartlett.

3708. Carter, Launor F. [Ed.] (U. Rochester, N. Y.) *Psychological research on navigator training.* Washington: Government Printing Office, 1947. Pp. ix + 186. \$1.25. (*AAF Aviat. Psychol. Prog. Res. Rep.* No. 10.)—Research on the selection and training of navigators in the Army Air Forces is summarized in this volume. The report, written to be "of interest to military and civilian psychologists and to non-psychologically trained military navigators," is concerned with practical, methodological, and theoretical problems typical of those encountered by the applied psychologist. An analysis of the navigator's job precedes a listing of aptitudes of the successful navigator and a report on the validity of tests used in the selection of navigators. There is a detailed account of the development of objective measures of skill in navigation, including printed tests, moving picture tests, and ground and air performance checks. These measures provided improved criteria for evaluation of selection and training procedures. Studies of training cover the improvement of instruction, the analysis of grading, graduation and elimination policies, the experimental evaluation of training aids, and the course of learning of navigation skills. There is a brief historical sketch of the organization conducting this research and an evaluation of its work.—N. Hobbs.

3709. Cason, F. L. [Ed.] *Proceedings of the personnel and industrial relations conference.* *Engng Bull., Purdue, Ext. Ser.*, 1946, No. 59. Pp. 93.—Representatives of industry and industrial psychology join in 5 sessions to discuss current industrial problems. H. M. Dirks points to the need for maximally effective personnel practices and names the major characteristics of such practices. Dean A. A. Potter of the Purdue School of Engineering describes the personality-development and placement programs of the University. Tiffin and Long discuss the use of recent vision tests in industry. E. B. Mapel outlines the requirements and outcomes of administrative planning. H. L. Summers presents problems of veteran reemployment. L. J. Miles as chairman, and L. E. Hall, R. Hampton, J. R. Clarke, and H. G. Semler contribute a series of 5 papers to a panel discussion of testing and its role in personnel administration.—J. G. Jenkins.

3710. Clark, Dean A., & Vogel, Victor H. *Mental illness and the expanded Federal-State Vocational Rehabilitation Program.* *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 292-296.—The authors outline the statutory limitations and implications of existing laws dealing with vocational rehabilitation. The national, state and local participating agencies are described. Assistance is needed from local pro-

fessional groups to make this program maximally effective.—C. E. Henry.

3711. Davis, Frederick B. [Ed.] (*Headquarters, Army Air Forces, Washington, D. C.*) *The AAF Qualifying Examination.* Washington: Government Printing Office, 1947. Pp. xvii + 266. \$1.25. (*AAF Aviat. Psychol. Program, Res. Rep.*, No. 6.)—The AAF Qualifying Examination was developed to supplant formal educational requirements in the preliminary selection of aircrew members for the Army Air Forces. Between 1942 and 1946 the examination was administered to over one million men, most of them high school and college students. 17 forms of the examination, containing approximately 2,910 different items, were published, the successive forms being modified in the light of research data regarding the efficiency of the examination in predicting graduation or elimination from elementary pilot training. Use of the Qualifying Examination in preliminary screening cut approximately in half the number of men that had to be tested with the more elaborate battery of classification tests. Numerous tests were developed and validated, including tests of vocabulary and reading comprehension, of information concerning contemporary affairs and aviation, of judgment and of logical, arithmetic, and other forms of reasoning, of mechanical comprehension, of perceptual abilities, and miscellaneous types, including paper-and-pencil psychomotor tests. Detailed descriptions of these tests, with sample items and validation data, are presented. The second chapter of the book outlines the principles followed in the construction of the examination. Appendix A describes the statistical procedures used in item analysis and validation, and subsequent appendices summarize the validation data obtained. Results presented and methodology described have wide applicability in psychometric work.—N. Hobbs.

3712. Eitington, J. E. *The post-war supervisor: detective in human relations.* *Personnel J.*, 1947, 26, 19-22.—The good supervisor is one who senses difficulties approaching and prevents them. The supervisor should know his own weaknesses and control them, so as not to irritate his workers. He should, for example, not show favoritism in work assignments or force his dislikes upon others. He should admit his personal errors, be able to reprimand and instruct without irritating the workers, and set a good example.—M. B. Mitchell.

3713. Henderson, Robert D., (*Bucknell U., Lewisburg, Pa.*) & Hoover, Dale W. *Interviewing methods used in the selection of salesmen.* *Personnel J.*, 1947, 26, 9-18.—No uniformity of procedure was found for selection of salesmen in the 27 companies replying to the request for information. However, the interview was an important step in most cases. Some companies have applicants interviewed and evaluated by two or three persons. The training, experience, and skill of the interviewer are most important in successful selection, for the interviewer must be able to obtain the necessary

information and be able to make an objective evaluation of the candidate.—*M. B. Mitchell.*

3714. Himler, Leonard E. *Psychiatric rehabilitation in industry.* *Res. Publ. Ass. nerv. ment. Dis.*, 1946, 25, 297-303.—Much educational work needs to be done in industry to effect the reemployment of men with NP histories and discharges. There is a real need for a rapid and reasonably accurate technique of evaluating job fitness among these cases. The type of supervision may be more important than the type of work. Probably 75% of the problems arising relate to relatively superficial readjustments, and a simple type of psychotherapy for use by plant supervisors and physicians needs to be developed. The psychiatrist may be envisaged as a catalyst in the interpersonal relationships existing throughout industrial life and work.—*C. E. Henry.*

3715. Kay, Lillian Wald. (New York U.) *Psychodrama examines the doctor.* *Sociatry*, 1947, 1, 35-42.—Actual acting-out of social situations related to the medical man's activities seems to lay a foundation for selection of those with suitable aptitudes. A number of factors in the physician-patient relation can be observed and analyzed using the psychodramatic technique. The most important are: ability to inspire confidence, patience and earnestness, and the doctor's motivation. Protocols of several experimental sessions are reproduced.—*R. B. Ammons.*

3716. Lepley, William M. [Ed.] (Pennsylvania State Coll., Pa.) *Psychological research in the theaters of war.* Washington: Government Printing Office, 1947. Pp. vi + 202. \$1.00. (*AAF Aviat. Psychol. Prog. Res. Rep.* No. 17.)—This report is a consolidation of the reports of psychological research detachments sent into the theaters of war for the purpose of obtaining research materials in 4 areas: the validity of established selection and classification procedures as measured by combat criteria, the definition of combat requirements for various aircrew positions, the selection of "lead" or "pathfinder" crews on the basis of aptitude, and the measurement of proficiency of aircrewmembers in combat areas with a view toward assisting in the formation of lead crews. Validation studies indicated that the classification battery for bombardiers, navigators, and pilots, which had substantial predictive efficiency for success in training, also had some value in predicting combat effectiveness. Studies of combat requirements revealed need for more effective selection for personality qualities, such as emotional control, judgment, maturity, leadership, and motivation. Use of proficiency measures was found feasible as one basis for forming crews. 7 recommendations concerned with the evaluation of aircrew personnel in combat are made.—*N. Hobbs.*

3717. Mitzel, M. Adele. (Inst. Vocat. Development., Baltimore, Md.) *The application blank in employee selection.* *Personnel J.*, 1947, 26, 6-8.—The application blank should call for facts such as training and experience which are pertinent to the job being applied for and possible future promotions.

Furthermore, the blank should be arranged so that the information can be objectively evaluated.—*M. B. Mitchell.*

3718. Roe, Anne. *A Rorschach study of a group of scientists and technicians.* *J. consult. Psychol.*, 1946, 10, 317-327.—Group Rorschachs were made on men engaged either as scientists or technicians, in the study of paleontology as a vocation. On the whole, these men tend to abstractions and to formalized objective thinking with a marked inhibition of any tendencies to project themselves into a situation. "They emphasize little, either with things or other people, and they have a rather passive emotional adaptation."—*S. G. Dulsky.*

3719. Sperisen, Walter. *Arbeitsscheu; eine psychologisch-pädagogische Studie.* (Work avoidance: a psychological-pedagogical study). *Beih. Schweiz. Z. Psychol. Anwend.*, 1946, No. 10. Pp. 159.—The consideration of this topic is from 3 points of view: (1) The nature of anti-work behavior is related to motivation, will emotion, and character. (2) Its genesis and development can be traced to predisposition, external factors, and actual work experiences. (3) Suitable educational experiences can serve as therapeutic or preventive measures. 154-item bibliography.—*R. B. Ammons.*

3720. Symonds, Percival M. (Columbia U. New York.) *Role playing as a diagnostic procedure in the selection of leaders.* *Sociatry*, 1947, 1, 43-50.—During the war the Office of Strategic Services used a role playing test for diagnostic purposes. Candidates were placed in pairs in situations of ego significance to them. Analysis of 110 situations used shows them to fall into the following types: personal criticism, interpersonal conflict of aims, moral issues, interview, rejection, intrapersonal conflict, authority-subordination.—*R. B. Ammons.*

3721. Thorndike, Robert L. (Columbia U., New York.) *Research problems and techniques.* Washington: Government Printing Office, 1947. Pp. viii + 163. \$1.00. (*AAF Aviat. Psychol. Prog. Res. Rep.* No. 3.)—This volume presents a general discussion of research problems encountered in the AAF Aviation Psychology Program and of techniques adapted or developed to meet these problems. Emphasis is primarily upon research methodology in the selection and classification of personnel for aircrew assignment, though research in training methods is also briefly considered. Methods and procedures of specific studies which are reported in detail in other volumes of this series are here summarized and integrated with a view toward general use. Topics covered include problems and procedures of job analysis; development and validation of single tests; procedures for item analysis; development and evaluation of criterion measures; procedures used for determining batteries, weights, and recommendations for assignment; problems associated with determining reliability of various types of tests given under various conditions; the use of correlational analysis in the improvement of selection and classification procedures; sources and methods of con-

trol of error variance in test scores; and, briefly, problems of research in training. In 2 appendixes are descriptions of methods used in the computation of correlations, multiple correlations, and regression weights. Procedures described in this volume are generally applicable in personnel psychology.—*N. Hobbs.*

3722. Young, Ross. *Personnel manual for executives*. New York: McGraw-Hill, 1947. Pp. xi+207. \$2.50.—Chapters on Human Nature, Principles of Management, Motivation, Human Relations, Instruction, and Supervision, are provided in this book, which is aimed at the executive or supervisor of all levels. A bibliography of books and journals is presented, as well as a list of visual aids relating to the various topics discussed.—*M. Siegel.*

VOCATIONAL GUIDANCE

3723. Bingham, W. V. *Inequalities of adult capacity*. *Eugen. News*, 1946, 31, 41-43.—This article is an editor's excerpts from a paper presented by the author at the annual meeting of the National Academy of Sciences in April, 1946. From an analysis of the A.G.C.T. scores of approximately 10,000,000 recruits it is concluded that America is exceedingly wasteful of its most precious natural resources, that scholarships should be increased in number for really superior applicants for higher education, that opportunity in colleges, technical institutions, and graduate schools should be opened more widely and discriminatingly, that staffs of qualified specialists should be maintained in every institution to identify the most promising students and to facilitate their development, and that ambition must be stirred in those whose aims are below the best their capabilities warrant.—*M. V. Loudon.*

3724. Brotemarkle, R. A. (U. Pennsylvania, Philadelphia, Pa.) *An analytical technique for use in the guidance of the multi-job-experienced college adult*. *J. consult. Psychol.*, 1947, 11, 82-87.—A technique based on the nondirective recall of work experience and satisfactions therein is presented. The counselee recalls and records duties, tasks, responsibilities, and personalities involved for each job held. He then rates degree of "Intellectual Satisfaction" and "Affective Satisfaction" for each statement of fact in the record. Finally he prepares a description of a job in which he would find the satisfactions found in his former job experiences.—*S. G. Dulsky.*

3725. Covner, Bernard J. (*The Berger Brothers Co., New Haven, Conn.*) *Nondirective interviewing techniques in vocational counseling*. *J. consult. Psychol.*, 1947, 11, 70-73.—The distinction between client-centered counseling and vocational counseling is not tenable. On the basis of the writer's experience, many vocational clients can be effectively counseled by traditional methods, but such an approach makes for poor handling of emotional complications which are extremely common. "To be able to handle the largest possible proportion of

clients, the use of nondirective techniques is recommended."—*S. G. Dulsky.*

3726. Korner, Anneliese Friedsam. (U. Chicago, Ill.) *Origin of impractical or unrealistic vocational goals*. *J. consult. Psychol.*, 1946, 10, 328-334.—Unrealistic vocational goals stem from (1) encouragement by school personnel, (2) pressure from family, and (3) emotional factors in the counselee himself. Competent vocational counseling must evaluate test results and help the individual integrate his emotional needs with an occupational choice which is both feasible and satisfying.—*S. G. Dulsky.*

3727. Lewis, Ralph H. (Y.M.C.A. Counseling Service, Toronto, Canada.) *Guidance in secondary schools*. Toronto: The Ryerson Press, 1946. Pp. viii + 83. \$1.25.—For the benefit of any who may be planning the installation of a Vocational Guidance program, this is a brief account of the development of one in a Canadian secondary school. It is an account of how one was planned and put in operation, describes the physical facilities used, record system employed, standardized tests used, interviewing forms and procedures, and includes lists of books made available for student and adviser use.—*R. W. Williams.*

3728. Long, Louis. (Coll. City of New York), & Hill, John. *A follow-up of veterans receiving vocational advisement*. *J. consult. Psychol.*, 1947, 11, 88-92.—206 veterans, mostly all men, average age 25-26, for whom a training program was recommended were followed up after 12-15 months. About 20% never started the program. Percentage of "drop-outs" was 23 for those taking a college program; 36 for institutional training not at a college level; and 42 for those taking on-the-job training.—*S. G. Dulsky.*

3729. Mallart, José. *Problemas de orientación profesional colectiva*. (Problems in group vocational guidance.) *Psicotecnia*, 1945, 5, 55-60.—Youth from rural districts are being attracted to cities and central industries in preference to remaining on farms. Part of this tendency is due to the failure of the educational system to provide suitable training for rural children, there being too great an emphasis on the classics and literature. Rural needs must be studied and understood better. Guidance should not be directed so much toward the physically handicapped, but effort should be made to keep those individuals in the rural districts who will find better adjustment there than they will in the cities.—*C. G. Browne.*

3730. Naville, Pierre. *Théorie de l'orientation professionnelle*. (Theory of vocational guidance.) Paris: Gallimard, 1945. Pp. 290.—In this critical examination of present vocational guidance practice it is indicated that for most young people the selection of an occupation is determined by chance, custom, or social environment. There should be a greater development of guidance facilities, including information about occupational trends and work experience. Aptitude is felt to be a general ability, biologically and socially determined, which in-

creases with growth through adolescence, reaches a plateau at maturity, and declines with age. The specific aptitudes which are presently found are artifacts of the tests which have been constructed, and the inadequate criteria which have been used to validate them. A proposed program to reform guidance practice includes the coordination by the national government of all guidance activities, from elementary school through technical schools; the development and dissemination of occupational information; the development of specially trained physicians to participate in measurement of aptitude; and national certification of counselors after a special two-year training.—G. S. Speer.

3731. Urrutia y Llano, José M. de, Figuerido, César Antonio, & Nebreda Merino, Joaquín. La ficha escolar y la colocación del alumno en las empresas. (The scholastic record card and placement of the student in industry.) *Psicotecnia*, 1945, 5, 11-13.—Scholastic record cards are proposed as an aid to prospective employees and employers in placing individuals in the best-suited job. A sample of the card proposed is given. It contains items which indicate scholastic achievement in various subjects and certain measures of personality.—C. G. Browne.

[See also abstracts 3440, 3512, 3766, 3777.]

INDUSTRIAL AND BUSINESS PSYCHOLOGY

3732. Greene, Ken, & Robinson, William S. (Columbia U., New York.) The relation between the percentage of "most" listeners to a radio station and the percentage of the total listening time obtained by it. *J. Psychol.*, 1947, 23, 255-281.—In some radio research studies people are asked to name the station to which they listen most. Other studies provide data telling what proportion of listening time people give to various radio stations. It is possible to relate for each station these two pieces of information. Empirical data show a consistent linear relationship between those two indices. It is shown that the difference in the share of audience time which two stations draw depends upon 3 factors: the total amount of listening done by the respondents; whether listening to the 2 stations is correlated; and the number of people who listen to one station more than to the other. It is then shown that the first 2 factors play a small role as compared to the third. As a result the difference in share of time depends essentially upon how many people listen to the one station more than to the other. Furthermore, within reasonable limits this relationship is linear.—M. Mercer.

3733. Haire, Mason. (Massachusetts Inst. Technology, Cambridge, Mass.) Psychological factors in the design of equipment. *Mech. Engng.*, N. Y., 1947, 69, 399-400; 402.—The values of psychological studies of equipment design found in military research, especially with aircraft, are also important in civilian engineering design.—C. M. Louttit.

3734. Marsico, William Edward. A study of the interrelationships between attitude toward certain products, feeling aroused by and belief in their advertising themes, and buying behavior with respect to these products. In *University of Oklahoma, Abstracts of theses . . . 1940*. Norman, 1947. P. 133. (*Univ. Okla. Bull.*, 1947, No. 970.)—Abstract of M.S. thesis.

EDUCATIONAL PSYCHOLOGY

3735. Albers, Mary Elizabeth, & Seagoe, May V. (U. California, Los Angeles.) Enrichment for superior students in algebra classes. *J. educ. Res.*, 1947, 40, 481-495.—An enrichment unit in second semester 9th grade Algebra was provided for an experimental group of students having Binet IQ's of 125 or higher. When compared with a control group the results showed that class time of the experimental students could be reduced 15% without reducing achievement in the basic course of study, and with a significant increase in knowledge of the enrichment material. Sufficient interest was found to provide the necessary motivation, teacher time involved was negligible, and the procedure was found to be administratively feasible without special training for supervision and guidance. 29 references.—M. Murphy.

3736. Axline, Virginia Mae. (Counseling Center, U. Chicago, Ill.) Nondirective therapy for poor readers. *J. consult. Psychol.*, 1947, 11, 61-69.—37 second graders, 8 girls and 29 boys, who were poor readers or nonreaders, were placed in a class where they were given freedom and an atmosphere of complete acceptance. The teacher provided experiences that would be primarily therapeutic. Many noteworthy gains in reading achievement were recorded.—S. G. Dulsky.

3737. Bates, Zelpha Mae. A study of the needs of freshmen home economics students and student personnel services in the School of Education of New York University. *Microfilm Abstr.*, 1946, 7, 27-29.—Abstract of Ed.D. thesis, 1946, New York U. Microfilm of complete thesis, 261 pages, \$3.26, University Microfilms, Ann Arbor, Mich. Publ. No. 823.

3738. Boucher, Martha Maxine. Inter-correlation of Seashore measures of musical talent, Kwalwasser-Dykema tests of musical talent, and ear training grades. In *University of Oklahoma, Abstracts of theses . . . 1940*. Norman, 1947. P. 125. (*Univ. Okla. Bull.*, 1947, No. 970.)—Abstract of M. Mus. Ed. thesis.

3739. Coughlin, Betty Ruth. New tests for appraising the results of instruction. In *University of Oklahoma, Abstracts of theses . . . 1940*. Norman, 1947. P. 72. (*Univ. Okla. Bull.*, 1947, No. 970.)—Abstract of Ed.M. thesis.

3740. Doll, Ronald C. (Public Schools, West Orange, N. J.) High-school pupils' attitudes toward teaching procedures. *Sch. Rev.*, 1947, 55, 222-227.—Responses of 1237 high-school pupils to a

questionnaire on teaching procedures ranging from "laissez faire" through "democratic" to "authoritarian" reveal a strong preference for democratic methods. Older pupils generally support the principle of freedom of activity, although the younger desire greater teacher guidance. Few would encourage laissez faire.—*R. C. Strassburger.*

3741. Engel, Anna M., & Baker, Harry J. (*Detroit Public Schools, Detroit, Mich.*) Socially maladjusted children in a city school system. *J. educ. Res.*, 1947, 40, 615-627.—In Detroit a 3-fold program has been developed to meet the needs of seriously maladjusted pupils. The Department of Special Education provides special training, treatment, and guidance for the physically, mentally, and socially handicapped. Approximately 8000 pupils are enrolled in special classes, and an equal number receive part-time special instruction. The Psychological Clinic provides group mental testing to large numbers of children, vocational testing of a semi-individual nature, and individual mental testing and social case-work in cases requiring intensive treatment. The Visiting Teacher Program is directed toward the prevention of maladjustment through early discovery and treatment.—*M. Murphy.*

3742. Eysenck, H. J. (*The Maudsley Hosp., London, Eng.*) Student selection by means of psychological tests—a critical survey. *Brit. J. educ. Psychol.*, 1947, 17, 20-39.—Some 600 titles, mainly American in origin, are the basis for this survey. Under optional conditions the correlations of intelligence test scores with college marks are between +.50 and +.60. They are somewhat higher when objective tests of academic achievement are used. There is evidence of a trend toward a more analytical approach in prediction, both as regards the tests used and the specific nature of the prediction. School standing appears to predict college success even better than intelligence tests, and a combination of both is superior to either. Items of personal background are only slightly related to success, but in combination with intelligence test scores they become more significant. Questionnaire measures of personality traits have little prognostic value, although interest inventories appear to be promising indicators of college success. Neuroticism estimated by the Rorschach test appears more closely related to achievement than intelligence. Selection tests have a definite place in the English universities, but to derive full benefits from their use centrally organized facilities are necessary. 189-item bibliography.—*R. C. Strassburger.*

3743. Gates, Arthur I. (*Columbia U., New York.*) A correlational study of a battery of reading diagnostic tests. *J. educ. Res.*, 1947, 40, 436-447.—All the tests included in the revised Gates Reading Diagnostic Program, and other very specific tests were given to 32 pupils comprising the 3rd grade in a New York City public school. Fairly substantial correlation was found between silent reading ability and the specialized tests. The coefficients ranged

from .30 to .82. Examination of the intercorrelations indicates that the component abilities fall into a number of clusters. This suggests the diagnostic value of the tests.—*M. Murphy.*

3744. Gray, William S. (*U. Chicago, Ill.*) Summary of reading investigations, July 1, 1945 to June 30, 1946. *J. educ. Res.*, 1947, 40, 401-435.—The author's annual survey with brief summary of 72 references.—*M. Murphy.*

3745. Heese, J. de V. (*U. Stellenbosch, South Africa.*) The handwriting performance of South African pupils. *U. educ. Res.*, 1947, 40, 522-527.—The handwriting of approximately 8000 high school pupils was studied by means of the South African Handwriting Scale measuring quality, speed and "handwriting performance" defined as quality times the cube root of speed. Girls were better than boys in every respect. In speed Afrikaans-speaking pupils were superior to English-speaking pupils, but in quality and handwriting performance English-speaking pupils were superior. Left-handed writers wrote more slowly than right-handed, but in quality and performance there was no significant difference.—*M. Murphy.*

3746. Heisler, Florence. (*Eastern Washington Coll. Educ., Cheney, Wash.*) A comparison of comic book and non-comic book readers of the elementary school. *J. educ. Res.*, 1947, 40, 458-464.—The number of comic books read per week by children in Grades 2 to 8 was determined. No significant relation was found between the reading of comic books and reading ability, achievement in English, vocabulary, intelligence, personality, or the size of the home library.—*M. Murphy.*

3747. Hendricks, B. Clifford. (*U. Nebraska, Lincoln.*) How to improve our tests. *Sch. Sci. Math.*, 1947, 47, 554-559.—Errors frequently found in teacher-constructed essay and objective examinations are illustrated, with improvements which might be made. More thought is needed in determining what is to be measured before the test is constructed.—*G. S. Speer.*

3748. Herrold, Kenneth F. (*Columbia U., New York.*) Teachership as leadership. *Teach. Coll. Rec.*, 1947, 48, 515-521.—Examination and evaluation of social forces in the class room can improve instruction, integrate teaching and learning, and provide a democratic atmosphere. The teacher as a leader must assist students to express their own needs, by participating as a member of the class rather than assuming the rôle of an authority. He can thus guide students in defining their purposes, discovering new objectives, and improving their methods of inquiry, as well as in appraising consequences of anticipated action and the techniques and results of cooperative management in a common enterprise. Paternalism and the clinical approach should be avoided.—*G. E. Bird.*

3749. Hoff, Arthur G. (*U. Redlands, Calif.*) The effect of the study of high school chemistry upon success in college chemistry. *J. educ. Res.*,

1947, 40, 539-542.—Of 340 college students 92 had not studied chemistry in high school. When the grades of those who had studied chemistry in high school were compared with the grades of those who had not, there was a slight, but not significant, difference in favor of the former. This difference was further reduced when the groups were equalized for scholastic aptitude. Approximately 50% of the students who had studied chemistry in high school achieved the same grade in college as they had achieved in high school.—*M. Murphy.*

3750. Iglesias de Emanuele, Maria Celia. Aplicación de los tests ABC en los Distritos de gral. Sarmiento, Vicente López y Pilar. (Use of the ABC Test in the General Sarmiento, Vicente Lopez and Pilar districts). *Rev. Educ., La Plata*, 1946, 88, No. 5, 38-50.—The ABC Test was administered to 2231 schoolchildren. The distribution of scores is given for each of the 3 districts involved.—*A. Gladstone.*

3751. Keneally, Katherine G. The construction and evaluation of a diagnostic test of study skills for grades 4, 5 and 6. *Stud. Psychol. Psychiat. Cath. Univ. Amer.*, 1947, 6, No. 8, Pp. vii + 60.—Knowledge of the particular skills that should be taught in the different grades indicates where to place emphasis in teaching, at the same time providing a means for remedial instruction. To this end, 10 skills for the intermediate grades were selected as the basis for tests which were administered to 800 pupils in grades 4 to 7 inclusive, in five public schools in New Bedford, Mass., during 1944. Statistical results suggest that if the final battery of tests were standardized on a larger school population, it would be useful in diagnosing the difficulties pupils encounter when studying independently.—*G. E. Bird.*

3752. Kornitzer, Henrietta. (District of Columbia Public Schools, Washington.) Problems for research in the education of partially seeing children. *J. educ. Res.*, 1947, 40, 592-597.—Research is needed on the distinction between blind and partially seeing children for purposes of education, on the influence of home attitude and the value of parent education, the relative value of day schools and residential schools, size and kind of type for the partially seeing, the teaching of Braille to those not totally blind to conserve their vision, and the integration of sight conservation teaching with the regular classroom instruction.—*M. Murphy.*

3753. Lovell, Catherine, & Ingram, Christine P. (Rochester Public Schools, Rochester, N. Y.) A high-school program for mentally retarded adolescent girls. *J. educ. Res.*, 1947, 40, 574-582.—In 1939, 41 girls from special classes in the elementary school, chosen on the basis of social readiness, were transferred to a unit in High School and designated as 7th year pupils. They ranged in age from 14-6 to 16-0, in learning ability from 65 to 75 I.Q. on the Stanford Binet, and from 4th to 6th grade school achievement. A 2-year program was developed for the 7th and 8th years. The purpose of the program

was to enable the girls to become socially integrated in the high school organization, to accept responsibilities of family and community life, and to acquire occupational skills and a knowledge of occupational opportunities. In 1942-43, 63 former pupils were interviewed. All were employed, most in war industries. Changes in the program have been made on the basis of studies of the experience of pupils after leaving high school. Special emphasis is placed upon the guidance score. During the year 1945-46 all 8th year girls who left school were placed occupationally.—*M. Murphy.*

3754. Lowenfeld, Berthold. (American Foundation for the Blind, New York.) Research in the education of the blind. *J. educ. Res.*, 1947, 40, 583-591.—Recent research is reviewed covering the following topics: the perception of obstacles by the blind, the blind infant, personality development, reading, intelligence tests, aptitude tests, the Oregon Plan. 20 references.—*M. Murphy.*

3755. McIntire, J. Thomas. (Southbury Training Sch., Southbury, Conn.) On the education of the cerebral palsied. *J. educ. Res.*, 1947, 40, 561-568.—The school achievement of 500 cerebral palsied children is studied with emphasis on factors which interfere with normal learning. The families of the children were representative of the total population in educational level and occupational status. The median age at examination was 9.8 years. The most frequently encountered physical handicaps were spasticity and athetosis. Speech defects were present in 55%; 8% had no speech. Feeble-mindedness or borderline intelligence was present in one third of the cases. Approximately four fifths of the children of school age were one or more grades retarded, and many had grade placement beyond their true achievement. 4 factors contribute to the academic retardation of cerebral palsied children: lack of opportunity, the physical handicap, mental retardation, and sensory disabilities which are more frequent than in unselected children.—*M. Murphy.*

3756. Monash, Louis. (Public School 6, The Bronx, N. Y.) Why children like or dislike school. *Understanding the Child*, 1947, 16, 67-70.—A questionnaire on "school attitudes" was filled out by 374 seventh and eighth grade pupils (210 boys and 164 girls) in a New York City public school. The results indicate that: 68% of the girls and 57% of the boys "like school and find it highly satisfying"; in general, the greater the pupil's success in school, the greater his liking for it; subject preferences of the boys were shopwork, drawing and science; and of the girls, drawing, homemaking and sewing; English subjects were placed at the foot of their lists by both boys and girls; excessive homework was regarded with disfavor; and, the teachers' personalities determined greatly the attitudes of the children toward school.—*J. L. Gewirts.*

3757. Moor, Paul. Theoretische Grundlegung einer heilpädagogischen Psychologie. (Theoretical foundations of a psychology of educational therapy.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1943, No. 4.

Pp. 123.—It is pointed out that educational psychology must be based on a carefully thought out point of view. A very useful approach can be made through pragmatism, where problems are attacked strictly from a practical standpoint, with ideas drawn from a wide variety of schools of thought. The basic psychological concepts are presented and explained with respect to development, personality structure, and character. Diagnostic procedures in educational therapy are discussed in some detail. 32 references.—R. B. Ammons.

3758. Myklebust, Helmer R. (*New Jersey School for the Deaf, West Trenton, N. J.*) **Research in the education and psychology of the deaf and hard of hearing.** *J. educ. Res.*, 1947, 40, 598-607.—While there is no definite line of demarcation between the deaf and the hard of hearing, for educational purposes a child is considered deaf if he has not acquired language because of inability to hear. Research progress is summarized. The most insistent needs for research at present lie in the measurement and analysis of intelligence in the deaf and hard of hearing, training programs to develop social competence, aptitude test for vocational guidance, means of determining motor coordination, non-language techniques for personality evaluation, the use of hearing aids, programs for the development of speech and the teaching of speech reading. 31 references.—M. Murphy.

3759. Phelps, Seth P. (*U. Chicago, Ill.*) **Students' opinions of work camps.** *Sch. Rev.*, 1947, 55, 214-221.—The educational values of voluntary work camp experience are exemplified in this study of a group of 25 high-school youths at two camps in Kentucky co-sponsored by the Laboratory School of the University of Chicago and the American Friends Service Committee. There is evidence that such experience promotes self-reliance and self-determination, provides satisfactory social relations, and supplies new experiences for personal achievement—in all, assists the young to a desirable degree of maturation. These youths display a heightened insight into the social and economic problems of the communities in which they lived and worked. Interracial living has enhanced their sense of tolerance and understanding of other racial groups. The campers acquire wholesome attitudes toward hard work, and develop habits of punctuality, in addition to learning the art of group living.—R. C. Strassburger.

3760. Reid, Gladys. (*N. Y. State Coll. Teachers, Buffalo, N. Y.*) **A preliminary investigation in the testing of lip reading achievement.** *J. Speech Disorders*, 1947, 12, 77-82.—A psychometric technique for measuring achievement in lip reading is described. There were 3 forms of the test, using 8 mm. Kodachrome motion picture film, each containing 5 parts including 17 vowels and diphthongs, 11 consonants, 10 unrelated sentences, a series of related sentences telling a story, and a short story at the end of which there were 4 questions to be answered by the subjects. The test was given to 62 girls from

the Lexington School for the Deaf (NY) and 37 girls from the State School for the Deaf at Delavan, Wisconsin. "The results of this study indicate low correlations approaching zero between lip reading ability on the test used and other factors available to the educator . . . it is reasonable to conclude [on the basis of this study] that lip reading ability is not quantitatively correlated with, and cannot be predicted from, the length of training in lip reading, mental age, I.Q., and grade status, respectively." —M. A. Seidenfeld.

3761. Schneeberger, Fritz. **Schwierige Schüler und ihre Erfassung.** (Understanding the difficult pupil.) *Beih. Schweiz. Z. Psychol. Anwend.*, 1946, No. 9. Pp. 102.—The teacher has the obligation to discover the problem child and refer him for observation. Data can be obtained from the reports of school, officials, parents, and others. Systematic observation and testing are necessary to the understanding of the child. Detailed observational reports from various points of view are presented for a number of children. 59 references.—R. B. Ammons.

3762. Shores, J. Harlan. (*U. Illinois, Urbana.*) **Some considerations of invalidities of general reading tests.** *J. educ. Res.*, 1947, 40, 448-457.—Lack of validity in general reading tests arises from: failure to determine whether there is such a thing as "general reading ability; separation of rate and comprehension; lack of variety in content areas; inadequate control of factors of interest and motivation; uncertainty of equal experience background for materials chosen.—M. Murphy.

3763. Townsend, Agatha. (*Educ. Rec. Bureau, New York.*) **An investigation of certain relationships of spelling with reading and academic aptitude.** *J. educ. Res.*, 1947, 40, 465-471.—Approximately 200 pupils in each of the grades from III through XII, enrolled in independent schools making up the membership of the Educational Records Bureau, were included in this study. Correlations between spelling and reading ranged from .461 to .679 median .511; between spelling and vocabulary, from .580 to .701, median .629. In 2 grades the correlation between spelling and academic aptitude was studied. The correlation between spelling and Kuhlmann-Anderson Intelligence Tests I.Q.'s in Grade V was .486; between spelling and ACE scores in Grade 12 it was .617. 17 references.—M. Murphy.

3764. Urrutia y Llano, José M. de, & Moneo Díaz, Antonio. **La inspección médico-escolar en las escuelas de trabajo.** (The physical examination in trade schools.) *Psicotecnia*, 1945, 5, 14-18.—On a physical examination, 40% of the students in a trade school in Bilbao were shown to be affected by organic deficiencies, most of which were abnormalities of growth, sense organs, and lungs. The need for an extension of the health service to all trade school students is stressed, with collaboration between primary and secondary schools included as part of the program.—C. G. Browne.

3765. Walker, Robert Lafayette. **The capacities and achievements of rural and city pupils in Choc-**

taw, Oklahoma, Public School. In *University of Oklahoma, Abstracts of theses . . . 1940*. Norman, 1947. P. 85. (*Univ. Okla. Bull.*, 1947, No. 970.)—Abstract of Ed.M. thesis.

[See also abstracts 3464, 3502, 3582, 3647, 3771, 3772, 3774.]

PSYCHOLOGICAL TESTS

3766. Baldwin, G. B. Clerical perception test. Minneapolis, Minn.: Educational Test Bureau, 1947.—Grades 9-12. 1 form. 16 (22) min. (See *J. consult. Psychol.*, 1947, 11, 156.)

3767. Baldwin, G. B. Inductive reasoning test. Minneapolis, Minn.: Educational Test Bureau, 1946.—Grades 9-12. 1 form. 20 (25) min. (See *J. consult. Psychol.*, 1947, 11, 156.)

3768. Baldwin, G. B. Motivation indicator. Minneapolis, Minn.: Educational Test Bureau, 1946.—High school level. 1 form. Untimed. (See *J. consult. Psychol.*, 1947, 11, 157.)

3769. Betts, G. L. [Ed.] Minnesota rate of manipulation test. Minneapolis, Minn.: Educational Test Bureau, 1946.—Revised manual. High school to adult level. Individual test, 1 form. (See *J. consult. Psychol.*, 1947, 11, 157.)

3770. Bice, Ramond C. (*U. Wisconsin, Madison, Wis.*) More effective use of machine-scored examinations. *Amer. Psychologist*, 1947, 2, 179.—A simple technique for indicating the proper answers on test answer sheets that have been machine-scored is described.—*N. R. Bartlett.*

3771. Brueckner, Leo J. (*U. Minnesota, Minneapolis.*) The development and validation of an arithmetic readiness test. *J. educ. Res.*, 1947, 40, 496-502.—A test consisting of 20 items on the mathematical phase and 20 items on the social phase of arithmetic was devised and administered to a large number of first grade children at the beginning of the school year. Achievement in arithmetic at the end of grades I and II was measured by a comprehensive 185-item test. Readiness Test and Achievement Test scores correlated .73 in Grade I and .87 in Grade II. The readiness test is administered individually, but preliminary work has been done in developing a group test.—*M. Murphy.*

3772. Crow, L.D., & Crow, A. Test for high school entrants. Rockville Centre, N. Y.: Acorn Publishing Co., 1947.—1 form. 40 (50) min. (See *J. consult. Psychol.*, 1947, 11, 158.)

3773. Doll, Edgar A. Vineland social maturity scale. Minneapolis, Minn.: Educational Test Bur-

eau, 1947.—Ages, 0-25+ years. Individual test, 1 form. Manual, record blank. (See *J. consult. Psychol.*, 1947, 11, 158.)

3774. Gregory, W. S. Gregory academic interest inventory. Beverly Hills, Calif.: Sheridan Supply Co., 1946.—College students and entrants. 1 form. Untimed, (60) min. (See *J. consult. Psychol.*, 1947, 11, 156.)

3775. Jurgensen, C. E. Standard profile chart. Minneapolis, Minn.: Educational Test Bureau, 1947.—The chart is arranged for plotting the profile of an individual on any 18 tests. (See *J. consult. Psychol.*, 1947, 11, 157-158.)

3776. Oseretsky, N. Oseretsky tests of motor proficiency. Edited by Edgar A. Doll. Minneapolis, Minn.: Educational Test Bureau, 1946.—Translated by E. J. Fosa from the Portuguese adaptation of M. I. L. da Costa. Ages 4-16 years. Individual test, 1 form. Manual, record blank, and materials. (See *J. consult. Psychol.*, 1947, 11, 157.)

3777. Staff, Personnel Research Section, Personnel Research and Procedures Branch, Adjutant General's Office. Validation of the General Clerical Abilities Test for selection and placement of War Department civilian personnel. *Amer. Psychologist*, 1947, 2, 141-144.—The work of the Civilian Personnel Research Subsection from 1943 until it was disbanded in 1945 is reviewed briefly, and the Clerical Abilities Test is described in some detail as the best test product of the unit from the standpoint of validation. The six sub-tests and method of scoring are described. Then extensive validity data, using pay grades and supervisors' ratings for criteria, are reported and discussed. "The point that stands out most clearly . . . is the marked variability in the validity of the test, both from one installation to another, and from one clerical occupation to another at the same installation."—*N. R. Bartlett.*

3778. Sullivan, E. T., Clark, W. W., & Tiegs, E. W. California test of mental maturity. Los Angeles: California Test Bureau, 1946.—5 levels: grades Kgn-1, 1-3, 4-8, 7-10, 9-adult. 1 form at each level. Untimed, (90) min. (See *J. consult. Psychol.*, 1947, 11, 156.)

3779. Thorpe, L. P., Clark, W. W., & Tiegs, E. W. Mental health analysis. Los Angeles: California Test Bureau, 1946.—4 levels: grades 4-8, 7-10, 9-college, adult. 1 form at each level. Untimed, (45) min. (See *J. consult. Psychol.*, 1947, 11, 156-157.)

[See also abstracts 3445, 3471, 3488, 3589, 3631, 3711, 3721, 3743, 3750, 3751, 3762.]

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